THE JOURNEY TO PATHS TO QUALITY:
A CASE STUDY OF TWO RURAL INDIANA PUBLIC PRESCHOOLS

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ABSTRACT

With increased accountability through educational reforms, educators are challenged to find intervention programs that promote student growth. High-quality preschool is not consistently offered across the country; preschool programs that are available vary in their effectiveness. While some states have offered high-quality preschool for several years, Indiana only recently began initiatives that expand high quality preschool. Paths to Quality (PTQ) is the Quality Rating and Improvement System (QRIS) that was selected to assess preschool quality in Indiana. The PTQ initiative was first implemented in the late 1990s. At its inception, PTQ was used only by child care providers, not by public schools. Now, the rating system has been adapted to allow public schools to participate (Elicker, Ruprecht, Langill, Lewsader, Anderson, & Brizzi, 2013). The PTQ system is now available to all counties in Indiana. More information is needed on this new initiative for public schools to successfully acquire PTQ Level 3 or 4 distinction. To fill this gap, the purpose of this multiple case study was to outline the steps school personnel needed to take in order to achieve a Level 3 or 4 PTQ rating. The study illustrates the process, staff experiences, and evaluation criteria of a Level 3 or 4 PTQ classroom. Two preschools were studied to understand how preschool programming for PTQ was implemented. Two kinds of data were collected: interviews with school staff and documentation of curriculum and program standards. A document analysis of curriculum and program standards was conducted to identify processes and procedures. Site evaluations were also compared. Main findings include the following: schools sought PTQ for additional funding, schools that sought PTQ encountered hidden costs, and that PTQ is indeed an attainable process. Findings took into consideration costs, staff requirements, training, and incentives. The PTQ implementation process allows

schools the opportunity to expand their offerings to four year olds. This research provides school personnel the ability to make sound decisions regarding their pursuit of PTQ.

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CHAPTER ONE: INTRODUCTION

As American K-12 schools face the challenge of higher standards and increased levels of accountability through school reform initiatives, accessibility to high-quality preschool education is more necessary than ever before. This need has heightened state policy makers' awareness that preschool is a viable solution in closing achievement gaps and providing an early intervention for students, rather than waiting until remediation is needed, as early childhood education is a proactive approach instead of a reactive one. A recent study demonstrated that early education is effective and is one of the best tools policymakers can utilize to promote positive educational and quality of life outcomes for all children (Heckman & Masterov, 2007). These examples frame the need for high-quality preschool and the way in which it fits into the accountability movement as a positive intervention to assist schools in meeting increasing demands.

National education accountability has been a moving target. Several initiatives and reform movements have been geared to increase academic achievement and motivate schools to adjust content to meet these higher benchmarks (Supovitz, 2009). These recent reform initiatives include No Child Left Behind (NCLB), the Common Core State Standards (CCSS), and Every Student Succeeds Act (ESSA). The sections to follow will provide an overview and implications of preschool programming.

No Child Left Behind (NCLB), 2002

The purpose of No Child Left Behind was to ensure that all students have a "fair, equal, and significant opportunity to obtain a high-quality education and reach, at a minimum, proficiency on challenging State academic achievement standards and state assessments" (No Child Left Behind [NCLB], 2002). Starting in 2002, states were tasked with establishing a set of high quality state standards and annual assessment measures for language arts, mathematics, and

science. Highlights of these reforms included calculating school performance based on adequate yearly progress (AYP). Additionally, AYP was factored using high school graduation rates and additional benchmarks for elementary and middle schools. Student progress was reported by subgroup such as economically disadvantaged, ethnicity, students with disabilities, and students with limited English proficiency. NCLB testing began in grade three. Policymakers believed preschool teachers could aid in closing the achievement gap by providing early instruction in academics that relate to the basic academic skills needed under NCLB (Stipek, 2006). Finally, by 2014, all schools had to be designated "proficient" (Abedi, 2004).

Implications for Preschool

After NCLB, a federal initiative was launched by President George W. Bush and First Lady Laura Bush to support preschool education and strengthen students' skills prior to entering kindergarten. Good Start, Grow Smart was established in 2002; its purpose was for each state to establish a mathematics and literacy early learning framework for children ages three to five (Brown, 2011). In order for students to be prepared for kindergarten, early childhood educators needed guidelines to implement classroom practices that are vital in teaching the essential skills and knowledge preschoolers need (Stipek, 2006). Prior to NCLB, less than half of the states had preschool standards (Neuman & Rokos, 2005). NCLB created an urgency for high-quality preschool to resolve achievement gaps. For example, in Texas, district leaders and educators created a pre-K report card to document student achievement (Brown, 2011). This example illustrates how an early education program can assist schools with high-stakes accountability that accompanies NCLB (Brown, 2011).

Common Core State Standards (CCSS), 2010

The National Governors Association and the Council of Chief State School Officers coordinated the Common Core State Standards Initiative, a set of national standards to guide K-12 education. Standards were collaboratively developed alongside teachers, administrators, and content experts. The purpose of the CCSS was to align the knowledge and skills that students should have in order to graduate from high school and succeed in a post-secondary institution or in the work force (Lavenia, Cohen-Vogel, & Lang, 2014). Also, by having national standards, students and teachers benefit. Students benefit by having access to relevant and rigorous learning. Teachers have easier access to larger repositories of resources; for example, instead of state level resources, national clearing houses will be available to all teachers (Phillips, 2015). Research conducted by the Thomas B. Fordham Institute compared current state standards to the CCSS. Findings indicated that the CCSS were "considerably superior" (Phillips, 2015). At the time of this writing, the standards were adopted by 41 states, the District of Columbia, four territories, and the Department of Defense Education Activity (DoDEA) (Kohler, Chirstensen, & Kilgo, 2014).

Implications for Preschool

The CCSS pose a challenge for public preschools that work closely with kindergarten teachers, given that the CCSS require more rigor in terms of reading and mathematics. This limits social and interactional-based curriculum, which was the focus of kindergarten (Zubrzycki, 2011). Kindergarten teachers need preschool teacher's assistance in accomplishing the goals of CCSS, which sharply contradict early childhood programming (Zubrzycki, 2011). Almon and Miller cite studies that support child-centered and play-based curriculum that supports early childhood learners. They argue the standards are "pushing down elementary literacy and mathematics skills and concepts into kindergarten when all the research indicators

demonstrate that children at this age are not developmentally ready to achieve these standards" (Miller & Almon, 2009, p. 43). As a result of CCSS, preschool teachers are teaching students about print concepts and alphabetic principles. They are also infusing activities that center around shared reading and writing in order for students to compare information from many sources and seek evidence to support what they say and write (Casbergue, 2017). A study focused on the pressure curriculum places on three- and four-year olds indicated by increased behaviors such as stress and aggression due to not having adequate time for play (Miller & Almon, 2009). The value of art and physical movement are emphasized in many early frameworks. Aligning preschool to the rigor of CCSS would be difficult due to the irregular development cycles of young children ages three to five (Zubrzycki, 2011). Policymakers did not utilize research of early child curriculum and development when they created the CCSS to align more readily to 21st century skills geared for college and career readiness (Miller & Almon, 2009). The CCSS may be an example of too much too soon, according to the authors of High/Scope, which is a time-tested preschool program that is child-based and focuses on play and inquiry development. Ample time is needed for curiosity and creativity in the preschool environment (Miller & Almon, 2009).

Every Student Succeeds Act (ESSA), 2015

The Every Student Succeeds Act (ESSA) is the reauthorization of The Elementary and Secondary Education Act (1965). The new act provides states with more local control compared to NCLB, which had mandated federal requirements. Previously, the procedure for identifying struggling schools and how to support them were prescriptive. Now, states can take the lead in making decisions to support and improve struggling schools by partnering with local stakeholders (Ferguson, 2016). These key differences allow states to be more responsive to

specific needs of their state, versus prescribed strategies that may not "fit" their local demographics. It also reduces federal intervention and regulation, leaving critical decision-making to each state. Informative decisions will need to be made in order for states to design high quality programming to assist K-12 educators in achieving academic success for their students (OECD, 2012).

Implications for Preschool

One important component of ESSA is the requirement that each state provide high quality preschool to all students. States have local control of what programming they select, yet they must ensure the program covers the major focus areas of the Early Learning Challenge, a federal grant program intended to build strong foundations for early learning (Every Student Succeeds Act [ESSA], 2015). The grant requires states to address the following areas: a coordinated state system, Quality Rating and Improvement Systems (QRIS), supporting the early childhood workforce, enhancing data systems, providing family engagement, strengthening community and local initiatives, and assessing progress from developmental screenings to kindergarten entry assessments (ESSA, 2015).

These initiatives and reforms emphasize the importance of equitable, high quality education, an increase in academic achievement, and recent growth. Overcoming these challenges will allow schools to provide high-quality preschool programming to aid children in being properly prepared for the rigors of K-12 education.

The Indiana Context

This case study will feature a few of Indiana public schools' efforts to implement high quality preschool. In the last 30 years, national policy work on public preschool programming has expanded (Cascio & Schanzbach, 2013). Child care rating and improvement systems known

as Quality Rating and Improvement Systems (QRIS) have been widely implemented in the US. QRIS is defined as a "ubiquitous tool for standardizing all early child care and education programs and systems" (Elicker, Ruprecht, Langill, Lewsader, Anderson, & Brizzi, 2013, p. 43). The project has three goals, consisting of incentives for providers to improve child care, informing parents about child care options, and providing better support in areas of development and school readiness outcomes. The QRIS structure varies from state to state, but all contain quality standards for each level, a process for standards monitoring, a process for supporting quality improvements, a financial incentive provision, and a process for disseminating information to parents and caregivers. Indiana has been rather passive in adopting a state preschool program (Elicker, Ruprecht, Langill, Lewsader, Anderson, & Brizzi, 2013).

Indiana's policy efforts to provide a framework for programming and funding for early childhood education began in 2001, during Governor Joe Kernan's administration. As a result of the policy efforts, Indiana now funds a minimal portion of preschool programs in the state. On My Way PreK funds, TANF vouchers, and CCDF vouchers provide funding for families to enroll in high quality preschool programs. Quality rating and improvement systems (QRIS) give preschool programs guidance to reach levels of quality, ranging from Level 1 to Level 4. If a preschool program reaches a Level 3 or Level 4, they can receive state funds. Preschool programs can be private, home-based, public, or ministry-based. On My Way PreK began in 2012 when five counties were selected to receive state and federal funding for preschool. Within these five counties, any preschool program (home, private, ministry, or public school) that achieves QRIS Levels of 3 or 4 is eligible for funds. Paths to Quality (PTQ) is the QRIS that was selected to assess preschool quality. The PTQ initiative was first implemented in the late 1990s. It was created by local community organizations in Ft. Wayne, Indiana. At its inception, PTQ

was used only by child care providers not by public schools. Now, the rating system has been adapted to allow public schools to participate (Elicker, Ruprecht, Langill, Lewsader, Anderson, & Brizzi, 2013). The PTQ system is now available to all counties in Indiana.

Problem Statement

Given that only a select few Indiana schools have been afforded the opportunity to participate in the state preschool pilot program, there is a lack of information provided and known among school districts regarding the PTQ process. Though initial results of the implementation of PTQ show success for the students who have participated thus far, more in-depth research is needed in order for schools to understand and successfully complete the requirements for PTQ.

Purpose Statement

The purpose of the case study was to outline the implementation process of a public school to achieve a Level 3 or 4 PTQ rating. The study illustrates the process, school personnel experience, and a PTQ coach's perceptions of how to achieve a Level 3 or 4 PTQ classroom.

The research revolves around the following research questions:

Research Question

The research questions are as follows:

1. How and why do schools seek PTQ? What requirements and challenges do public schools encounter as they work through the process and procedures needed to achieve Paths to Quality Level 3 or 4?

   1a. What action steps are needed for of each phase of PTQ implementation?

   1b. What are the administrators', teachers', and coaches' perceptions of the PTQ process?

   1c. How do stakeholder roles differ throughout the PTQ process?

Significance

This case study provides tangible evidence of the effectiveness of high quality preschool, not only in Indiana but also at the national level. As numerous studies indicate, preschool is a vital piece of the educational success of students (see for example, Perry Preschool Project or Abecedarian Study). Indiana's On My Way PreK allows students access to high quality early childhood programming, which in turn creates a greater opportunity for school readiness and skill development. This case study illuminates the PTQ process by providing educator perceptions of their role and what tasks were required to achieve PTQ Level 3. Since there are so few PTQ public school sites, this case study creates meaningful guidance on how to implement more high-quality preschools within public schools.

Limitations

There are several limitations that influence the case study. First, state funded preschool is a relatively new concept in the State of Indiana. The pilot program began in 2015 (NIEER), and only five counties were initially selected to participate. In order to receive state funding, a preschool must acquire a Level 3 or 4 on the Quality Rating and Improvement System (QRIS), Paths to Quality (PTQ).

Second, public schools' achievement of the necessary Paths to Quality rating of Level 3 or higher is low. In 2013, there were 1925 public schools in Indiana; only 81 of those schools were labeled PTQ Level 3 or higher (Paths to Quality, 2018). In order for schools to achieve this distinction, they need to know what it means and what steps and actions are required to achieve it, and they must have the necessary resources to successfully complete the process.

Third, there is little information available regarding the affordability and constraints of implementing a PTQ preschool program. It is difficult to measure the impact of this program since it has only been in place for a few years.

Finally, evaluations of QRIS and PTQ in general are still in their formative stages. This lack of data hinders educators in choosing programs when impact cannot be measured nor understood (Elicker, Ruprecht, Langill, Lewsader, Anderson, & Brizzi, 2013).

Delimitations

In order to provide an in-depth analysis of Paths to Quality implementation, several schools must be considered. This case study focuses on two rural schools. Rural schools make up the majority of Indiana elementary schools (See Table 1.1). Urban and suburban schools may differ in their pursuit and attainment of PTQ due to larger amounts of funding and resources. The case study only interviewed school administration, preschool teachers, and a PTQ coach. Two public schools that have achieved PTQ Level 3 were studied.

Table 1.1 Indiana Elementary School Demographics

Type	Percentage
Metropolitan	13%
Rural	55%
Suburban	21%
Town	11%

The study was limited to a four-month period from September to December 2018. A longer period of time would have provided more in-depth analysis.

Definition of Key Terms

The following terms provide clarification for readers to understand throughout the case study.

Adequate Yearly Progress (AYP): A federal reform term for measuring annual assessment measures for language arts, mathematics, and science.

Child Development Associate (CDA): A credential for early childhood educators. Required for PTQ Level 2.

Childcare Development Funds (CCDF): A federal program that assists low-income families, families receiving temporary public assistance, and those transitioning from public assistance in obtaining childcare so they can work, attend training, or continue education.

Childcare Resource and Referral (CCR&R): An agency that provides meaningful learning experiences, quality coaching and ongoing technical assistance to Indiana early childhood providers.

Common Core State Standards (CCSS): A set of national standards that guided K-12 education.

Every Student Succeeds Act (ESSA): The reauthorization of The Elementary and Secondary Education Act (1965).

Family of Social Services Administration (FSSA): A health care and social service funding agency. Ninety-four percent of the agency's total budget is paid to thousands of service providers ranging from major medical centers to a physical therapist working with a child or adult with a developmental disability. The six care divisions in FSSA administer services to over one million Hoosiers.

Head Start: A federal preschool program began in 1965 (Duncan, & Magnuson, 2013). Head Start is administered by the Administration for Children and Family within the US Department of Health and Human Services. Head Start has served more than 30 million students nationwide (Zigler & Muenchow 1992).

Limited Licensing Exempt Provider (LLEP:) Childcare providers not licensed by the state. When a preschool is operated in a public school, the Indiana Department of Education is responsible for regulating them.

National Association for the Education of Young Children (NAEYC): A process and structural standards for preschool programs. The standards contain components of required classroom attributes, including supportive teacher relationships, best practices, age appropriate evaluation tools, and effective hands-on materials. In addition to the standards components, minimum guidelines are given in the areas of teacher credentials, curriculum, class size, and staff-child ratios (Pianta, Barnett, Burchinal, & Thornburg, 2009).

National Institute for Early Education Research (NIEER): The National Institute for Early Education Research (NIEER), housed at Rutgers University, conducts academic research to inform policy supporting high-quality, early education for all young children (NIEER, 2015).

No Child Left Behind (NCLB): A federal legislation to ensure that all students have a "fair, equal, and significant opportunity to obtain a high-quality education and reach, at a minimum, proficiency on challenging.

On My Way Pre-K: An Indiana program that awards grants to 4-year-olds from low-income families, so they may have access to high-quality Pre-K programs the year before they begin kindergarten. Eligible families may use the grant at any approved On My Way Pre-K program. Approved programs may be located in a public or private school, licensed child care center, licensed home, or registered ministry, as long as that program meets the quality requirements and is registered as an On My Way Pre-K provider. Families may choose from a program that is full or part-day, as well as from programs that end with the school year or continue through the summer (On My Way Pre-K, 2017).

The Office of Early Childhood and Out-of-School Learning (OECOSL): The office oversees early child care, education and out-of-school-time programs.

Paths to Quality (PTQ): Indiana's Quality Rating and Improvement System began in 2008. There are four levels of quality and provides standards for licensed child care centers, home-based, ministries, and public schools. (Paths to Quality, 2018).

Perry Preschool Project: The Perry Preschool Project includes a five-year program from 1962 to 1967. The program was offered five days a week for 2.5 hours per day. The target enrollment was for low-income African American students. There were 123 program participants. The teacher-student ratio was 1:6, and certified teachers were trained in early childhood development. A final component of the project required weekly home visits, conducted by the teachers, to actively include the families in the program (Ryan, 2006).

Preschool: An early childhood programming that takes place the year before kindergarten.

Provider Eligibility Standards (PES): Indiana Legislation was passed in 2001, 2002, 2003, 2005 and 2013 requiring childcare providers receiving Child Care and Development Funds (CCDF) to meet certain provider eligibility standards. Child Care providers must be able to demonstrate compliance with these standards prior to the receipt of any CCDF funds (IN.GOV, 2017).

Quality Rating Improvement Systems (QRIS): Developed to assess and improve the quality of early care and education programs for children birth to five. Also, increases parent awareness about which programs meet defined levels of quality (Access and Quality Archives, n.d.).

Rural school: Schools characterized by geographic isolation and small population size.

Universal Pre-Kindergarten (UPK): Pre-K programs that are available to any child in a given state, regardless of family income, children's abilities, or other factors (Colker, 2009).

Organization of the Study

This dissertation is divided into five chapters followed by references and appendices. Chapter Two features a literature review that includes preschool quality rating systems, benefits of preschool, programming options, funding, and preschool policy. Chapter Three outlines research design and methods. A description of the instruments that were used to gather data, the procedures followed, and how the sample was selected is also included in Chapter Three. Chapter 4 provides a detailed analysis of the findings. The major findings, conclusions, and recommendations for future research are shared in Chapter 5.

Summary

This chapter emphasizes the need for high quality early childhood education on a national level. With the increased accountability through educational reform, educators are challenged to find intervention programs that assist children and families. High-quality preschool is not consistently offered and varies in program effectiveness from state to state. While some states have offered high-quality preschool for several years, Indiana only recently began initiatives that expand high quality preschool. More information is needed on this new initiative for public schools to successfully acquire PTQ Level 3 or 4 distinction.

CHAPTER TWO: REVIEW OF LITERATURE

In this chapter, I review literature on preschool. The content contained in this chapter provides an understanding of what constituted high-quality preschool programming and its resultant benefits for public schools. Readers are given a brief historical review followed by a theoretical explanation of preschool programming. The review illustrates examples of high-quality programming throughout the United States and concludes with a focus on Indiana's choice of programming and the progress it has made towards its preschool goals. The literature review concludes with an analysis of Indiana's early childhood programming, funding, and its quality rating system.

In the age of accountability, high quality programming at all levels of education is paramount. Preschool programs through higher education (P-16) pursue excellence recognition. As Indiana seeks universal preschool for all four-year olds, more information on accountability is needed, though preschool programs are evaluated with the Quality Rating and Improvement Systems (QRIS). The information gleaned from this dissertation will enable public school administrators to make informed decisions about seeking high quality preschool programming. Thus, the purpose of this study is to examine the criteria and processes involved in the implementation of Indiana's Paths to Quality (PTQ), Indiana's unique QRIS.

High-quality preschool programs must consider the whole child in order to be successful. The literature review examines theories of how young children learn. It is also important that readers know how preschool began as an education institution and what types of programs have evolved over time. The review is intended to inform the reader and provide an understanding about what it takes for a public school to meet quality-rating standards needed to be "high quality."

Theoretical Framework

In this section, I examine constructivism, a dominant theory used in early childhood education. I first provide an overview of three theorists: John Dewey, Jean Piaget, and Lev Vygotsky. I then examine how each theorist conceived of education environments, teachers' roles, and curricular materials. Finally, I compare and contrast the nuances of each theorist's perspective.

Constructivism is a way of explaining how people learn. In a constructivist classroom, an observer would see students solving real world problems. Teachers meet students where they are in their learning instead of having a preconceived notion of where students should be. Teachers facilitate student learning as a guide and facilitator versus a "sage on the stage" approach (Brooks & Brooks, 1999). These learning strategies can be referred to as active participation and as the pedagogical strategy "learning is doing." Children learn best by participating, according to constructivist theory. The following paragraphs provide examples of three theorists who are considered constructivists.

John Dewey (1859-1952) is known as one of the United States' most influential educational philosophers (Dodd-Nufio, 2011). He believed traditional education "imposes adult standards, subject matter, and methods upon those who were only growing slowly toward maturity" (Dewey, 1938, pp. 18-19). Dewey's progressive thinking urged educators to focus on the whole child using active learning, including three aspects: the nature of knowledge, teaching, and learning. Active learning was based on an individual experience constructed and organized through learning (Dewey, 1938). Progressive education and active learning were major themes in Dewey's research.

Similar to Dewey, Jean Piaget (1896-1980) viewed the child as an active and constructive thinker who learns when ready to learn. The assimilation-accommodation model of cognitive growth focused on the active, constructive nature of a child with four stages of development (Flavel, 1996). Piaget's view of cognitive development included a progressive reorganization of mental processes, resulting in biological maturation and environmental experiences. Piaget's stages of development provided a foundation for a child's knowledge base (Piaget, 2001).

Building on Piaget's theory that children developed in a sequence, Lev Vygotsky (1896-1934) developed the Zone of Proximal Development (ZPD), "the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance, or in collaboration with more capable peers" (Vygotsky, 1978, p. 86). This theory illustrated a range of what an individual can accomplish on their own, versus needing direction from a teacher or typical peer to complete a task (Vygotsky, 1978). Vygotsky also outlined a cognitive development theory based on socially relevant tools. This theory illuminated how a student might use a tool to assist in solving a complicated problem by allowing the tool to accompany an action to accomplish their goal or task (Vygotsky, 1978, p. 30).

Table 2.1 provides insight on each theorist's ideal classroom environment, curriculum, and teacher role. Each theorist's views are described in the paragraphs that follow Table 2.1.

Table 2.1 Early Education Constructivist Theorists

Constructivist Theorists	Theory	Classroom Environment	Curriculum	Teacher Role
Dewey	Progressive education	Active Learning Physical and mental learning	Child based	Role Model
Piaget	Assimilation and accommodation	Discovery oriented	Developmental based	Limited
Vygotsky	Social context of learning and ZPD	Based on social interaction	Play based	Significant

While sharing hallmarks of constructivism, each theorist had some unique nuances to their thinking as illustrated in Table 2.1. The following paragraphs highlight what each theorist believed to be an ideal classroom environment, an effective curriculum, and a teacher's roles in the classroom.

Classroom environment was viewed from each theorist as a hands-on approach for both the student and the teacher. Dewey saw the classroom environment as active, with physical and mental thinking taking place. Dewey emphasized that learning is based on personal experience. He felt that active learning entails working out real life problems (Dewey, 1938). In other words, children could learn naturally through life experiences. Dewey's philosophy stressed that learning was organic and could connect the learner with experiences. A student's learning was fluid, changing from day to day, hour by hour. By appealing to a child's interests, excitement was created. Educators must meet children at their own ability level.

Similarly, Piaget saw the classroom environment as a discovery zone. By providing a stimulating environment, Piaget believed students learn best. The classroom should be student-centered, with concrete materials and hands-on activities (Piaget, 1953).

In contrast with Dewey and Piaget, Vygotsky viewed an effective classroom environment as one that promotes learning through social interaction with peers and teachers guiding learning. Cooperative learning lends itself to Vygotsky's ZPD, using positive interdependence, face-to-face interaction, individual accountability, small group, interpersonal skills, and group self-evaluation, which mirrored Dewey's view of learning environments (Doolittle, 1997).

Preschool curriculum was interpreted by each theorist in unique way. Dewey argued that children should drive the curriculum rather than the content. Dewey's progressive thinking urged educators to focus on the whole child, using active learning. He believed that children should drive the curriculum, not the other way around (Dewey, 1956). He also perceived that curriculum should meet the needs of both student and society. Dewey understood the power and responsibility of learning impacts on both children and adults and how they are citizens (Lindsay, 2015).

Piaget took a more step-by-step approach to curriculum by allowing child development to guide curriculum based on his stages of development, which assists educators in selecting standards that are attainable and challenging at all levels of education. He further believed the curriculum should be flexible (Whittengton, 1973). Piaget stressed language and social interactions as two essential processes in education (Piaget, 1950). Preschool age children, according to Piaget's stages of development, should think about things symbolically. An example of this would be to make one thing, a word or object, stand for something else (Piaget, 1950).

Vygotsky believed curriculum should be play-based to ensure social interaction carries over into content that is presented. Vygotsky thought the curriculum should also be flexible. He stated, "teaching should be organized in such a way that reading and writing are necessary for something" (Vygotsky, 1978, p. 117). Vygotsky placed more emphasis on social interaction while Piaget focused on curriculum as being dependent on stages of development.

A teacher's role played a major part in each theorist's views on early learning. Dewey saw the teacher as a role model to allow students to experience their learning by modeling what their teacher does. Dewey found that teachers should be highly trained. He would have urged educators to resist the unwarranted contemporary policies and practices that have traditionally been the focus between the child and the curriculum (citation). Examples of this included the notion that subject matter is fixed and ready-made and what a child experiences with learning is not "hard and fast" but instead, a fluid process (Simpson & Jackson, 2003, p. 25). However, Piaget believed the teacher should take a different role in a child's learning due to how students grow based on their stages of development. The teacher should be present to facilitate learning, yet the child should be at the center of their own learning. Vygotsky aligned more with Dewey's thinking and thought that the teacher played a significant role in a child's learning. He believed teachers needed to learn, study, and teach activities that incorporate skills into real-world tasks (Doolittle, 1997). In the Vygotskian classroom, teachers were actively participating in tasks with the students on a regular basis (Vygotsky, 1978).

The early education theorists presented here provided foundational guidelines to current educators in the areas of classroom environment, curriculum, and the teacher's role. These components were vital to a quality educational experience. Throughout history and into the

present, these theorists' work is replicated and incorporated into preschool programs. The next sections describe how preschool began and how it was still evolving.

The History of the Preschool Movement

Preschool emerged in colonial America, with schools for young children beginning as early as 1647. Massachusetts enacted a law that required towns to establish early childhood schools (Spodek, 1985). Groups that fostered this movement included the Puritans, who emphasized education to encourage literacy. Reading the Bible was an expectation of all Puritans; therefore, the Puritan father was required to educate his children (Schutt, 1998). This group felt that young children should learn to read by the age of three or four (Spodek, 1985).

Infant Schools

Infant Schools were established in many cities across the United States in 1827 (Spodek, 1985). Children could be enrolled starting at eighteen months. The establishment of infant schools was focused on serving three purposes. First, it provided parents a source of childcare so they were able to work outside the home. Second, it allowed children to socialize with peers, as well as prepare children from poor homes to be more successful in public schools. Finally, it introduced the opportunity to reform early education methods and implement the Pestalozzian style of teaching, which emphasized strengthening students' own abilities (Vinovskis, 1993). Infant Schools focused on activity-oriented lessons and were more hands-on than primary schools. Infant schools had more favorable ratings than home schools or primary schools. Despite this success, the popularity of the Infant School was short lived. By the 1830's, enrollment had declined, mainly because of a paradigm shift to the role of mothers as the primary educator. "Too much too soon," was the underlying reason for a decline in this model, in addition to budgetary constraints (Spodek, 1985).

American Preschools

American preschools began in the 1910s after World War 1. Two Europeans, Friedrich Froebel and Maria Montessori, pioneered models on which many American preschools were founded.

Froebel, a German, founded Froebelian kindergarten. He viewed learning as holistic when combined with developmental progression (Carpenter, n.d.). Froebel's program created schools for children ages 4-6. His goal was to assist the middle class working family. The term kindergarten, or "garden for children," began with a focus on play and occupations. Froebel viewed the classroom as a series of combined exercises, including games, songs, marches, handwork, and progressive play (White & Buka, 1987). He viewed the teacher's role to include growth, studying the child, and discerning each child's needs (White & Buka, 1987). Froebel's curriculum concept originated from The Nature Philosophy of Schelling, Novalis, Carus, Fichte, and Schleiermacher, who valued recognizing the work of the universal divine principle of nature and science as having bearing on the development of natural beings in the science of education. This notion applied to all kinds of individuals in all stages of development (White & Buka, 1987).

Maria Montessori, Italy's first female physician, pioneered the rehabilitation of special-needs children in a school setting. The six principles of the Montessori school model included: child development must be an automatic education, observations of the child drive pedagogy, a child's self-development can be observed and expressed in a school, the school should be appropriate in nature to encourage constructive responses to initiations and inquires of new activities, children should have the liberty to freely act and interact within their own

developmental areas and, an emphasis is placed on sensory training (White & Buka, 1987). The schools were built upon the constructivist frameworks of Dewey, Piaget, and Vygotsky (Dodd-Nufrio, 2011).

Based on these principles, Montessori discovered that children learn best by doing. Multi-age classrooms were encouraged because they provided children more opportunity to grow (Klein, 2007). A Montessori curriculum should contain exercises for practical life, sensory education, and language education. All activities should be purposeful and involve sensory learning (Klein, 2007). Montessori believed a teacher should model and demonstrate the use of learning materials to help students focus. The teacher in this setting was encouraged to be credentialed in the Montessori Model (Klein, 2007). Based on these models, the emergence of preschool as we know it today is still in operation with many of the same principles developed over 100 years ago. These similarities include many constructivist ideals such as Piaget's child development theory and Dewey's 1925 publication of *Experience and Nature,* which provided the foundation for American Nursery Schools.

American nursery schools had three origins: family oriented preschools, welfare oriented preschools, and research oriented preschools, which were housed in university settings (White & Buka,1987). The first nursery school was a family oriented preschool. Nursery schools provided liberation to women who felt isolated by motherhood. By establishing preschools, children and their mothers benefited from group experiences, and mothers became better parents through hands-on child study. The American Council of Cooperative Preschools reported 800 schools at the height of the movement. In 1960, the council changed its name to Parent Cooperative Preschools International, and in 1980, there were 10,000 members (White & Buka, 1987).

Child-welfare oriented preschools were founded by Abigal Eliot and Edna Noble.

Their purpose was to serve working parents. The focus was a comprehensive program that promoted health, nutrition, and education of parents. As a result of this nursery school movement, the National Association of Nursery Education formed in 1930 and in 1964 the organization changed its name to the National Association for the Education of Young Children (NAEYC) (White & Buka, 1987). The welfare-oriented program, for a limited time during the Depression, changed its focus to provide relief to unemployed parents by supporting the growth and well-being of these children. Thus, the welfare-oriented nursery school tradition began.

Research-oriented preschools were started in the 1920s by the Iowa Child Welfare Research Station, Bureau of Educational Experiments, Fels Institute at Yellow Springs, Teachers College, and many other universities. All centers were located near or in child welfare institutes and centers. These centers provided a wealth of research used by the child development movement. The preschool teachers employed in these institutions were trained there as well. These centers provided important points of reference for the research and growth of preschools (White & Buka, 1987). Research oriented preschools were the beginning of a trend that took hold in the 1960's when preschool studies began to investigate the impacts of modern preschool on both large and small scales.

The next section provides more information on the benefits of preschool. Some of these programs were created to test a particular curriculum or methodology, while others were based on research for a specific population, and outcomes were then measured.

Preschool Studies

Research on preschool expanded during the 1960s and 1970s. Dozens of studies were focused on research-initiated programs, which were both small-scale and large-scale, and the research emphasized how the programs benefited students and families (Scheinhart, 2013). As

described later in this review, research was later conducted on Universal Pre-Kindergarten (UPK) programs and their effectiveness. State programs, research-initiated ones, as well as large-scale preschools provided several benefits to students. The following sections share studies that investigated various impacts of preschool. First, research-initiated programs will be discussed, followed by large-scale programs, and concluding with UPK programs. Each section includes information on programming, student demographics, research design, and program impacts.

Research-Initiated Programs

Preschool programs created by researchers who wanted to implement compensatory programs that could be studied through experimental or quasi-experimental designs to estimate program effects were defined as research initiated (Barnett, 1992). Researchers developed programs to improve the academic success of students living in poverty before they enrolled in the K-12 education system (Barnett, 1992). This program type was small in scope, well-funded, and carefully scrutinized because the programs were operated by experts and focused on cognitive and social development. Research-initiated programs offered higher quality than a typical public program because they were supervised closely, directed by experts, had low child-staff ratios and small group sizes (Barnett, 1992). The studies were focused on cumulative school success indicators like grade retention rates, special education placement percentages, and graduation rates. As described below, each program found IQ gains, as well (Barnett, 1992). Characteristics of the studies included a program description, students' age at entry, length of program, years of the program, and research design. Demographic data included mother's education level, student ethnicity, and gender (Barnett, 1992). Later, in the 1970's many of these researchers joined together to share their results in the *Report for Consortium for Longitudinal Studies* (Lazar, Darlington, Murray, Royce, & Snipper, 1982). Researchers shared study results

comparing children's intellectual performance at school entry, retention rates, placements in special education, and high school graduation rates (Scheinhart, 2013). The report highlighted 12 programs, differing in ages served, years served, and location. Some were home based while others were center based (Scheinhart, 2013). The next sections of the literature review share examples of some of the research-initiated programs mentioned in the consortium study that were found to have positive impacts on student success in school and on into adulthood.

Perry Preschool Project, Ypsilanti, Michigan

The primary purpose of the Perry Preschool Project of researcher Weikart was to provide early intervention services to African American children living in poverty and determined to be at a high risk for school failure due to mental retardation[1] associated with cultural deprivation[2] (Weikart, 1966). The need surfaced when Weikart discovered that some local systems, at times, would not provide educational reform to assist low-achieving students, thus contributing to juvenile delinquency. The Perry Preschool program format included 2.5 hours of preschool for 5 days a week, weekly home visits, and sessions that lasted from fall to summer. The program duration was two years. The curriculum model featured Piaget's theories of child development (Weikart, 1966).

Weikart wanted to test the hypothesis that early intervention had a positive effect on how children performed in school (Schweinhart & Weikhart, 1980). The study design randomly assigned children to experimental and control groups. The initial sample size of the experimental group was 58 students and that of the control group was 65. The follow-up sample size remained the same for both groups. Treatment participants entered at age three or four for a program

[1] The terminology used was prominent during the 1960s
[2] The terminology used was prominent during the 1960s

length of one or two years (Weikart, 1966). Student selection was limited to those already attending Perry Elementary School who had siblings of preschool age. Family demographics were used to select students with low socio-economic status, which was based on occupation, education, and housing over-crowdedness; the child was also given an IQ test. Three-year selection criteria included: parent's SES status based on parent's education, occupation of head of household, and house density. If family score was within range, the child was given a Stanford-Binet intelligence test and had to score within a range of 70-85[3] (Weikart, 1966). The comparison group or control group consisted of students that attended a preschool comparable to Perry, or that attended non-parental care (Weikart, 1966). Characteristics of the students included: the average mean IQ was 79, their mother's years of education was on average nine years and four months, all participants were African American, and 42% of the preschoolers were female. Longitudinal program results showed only 15% were retained versus 20% in the control group. Special education placement was 37% compared to 50% of the control group. The graduation rate of these students was 67% as opposed 49% of the students in the control group. The follow-up survey of this group was the most extensive of any studies in that it tracked their progress at ages 3-11, 14, 15, 19, 27, 40, and 50 (Weikart, 1966). To date, no other study had engaged in such an extensive follow up.

Early Training Project, Tennessee

The Early Training Project conducted by Gray and Klaus (1965) studied the impact of preschool on black/low income students. The researchers had concerns that local schools were not equipped to educate low-income and minority students; the researchers described the program's purpose as an "attempt to see whether it is possible, by specifically planned

[3] Average IQ is 100

techniques, to offset the progressive retardation[4] in cognitive development and school achievement that characterizes the culturally deprived child as he passes through his years of schooling" (Gray & Klaus, 1965, p. 33). The Early Training project consisted of four-hour preschool classes, five days a week, plus 10 weeks in the summer, and weekly home visits. The program was created to enhance students' cognitive, perceptual, and language development (Gray & Klaus, 1965). By instilling positive attitudes such as achievement orientation and ability to delay gratification, the program could lead to higher school performance.

The design study was randomized. Participants' entry age was either three years, eight months, or four years, eight months, and program length was 14 or 26 months. The two towns selected in the study were considered the "poorer" communities in the area. Selection of participants included randomly assigning students to one of two treatment groups or one control group. The initial sample size of the experimental group was 44 students and the size of the control group was 21 students. The follow up sample size fell to 36 students in the experimental group and 16 students in the control group. The control group included students from a near community, with similar demographics. Characteristics of the experimental group were a mean IQ score of 88, their mother's education level was nine years and two months, all participants were African American, and 56% of them were female. Program results included positive gains in retention rates: 58% retained in the experimental group vs. 61% in the control group. A significant gain was noted in special education, where only five percent of the experimental group was identified for needing special education services, while 29% of the control group needed these services. The graduation rates were higher as well, 68% as compared to 52% in the experimental and control groups respectively. The study followed up when the participants were

[4] The terminology used was prominent during the 1960s

19 years old. Overall, the study found gains in intelligence and achievement tests (Gray, Ramsey, & Klaus, 1983).

Institute for Developmental Studies (IDS), Harlem, New York

The Institute for Developmental Studies was created to offer an enriched and stimulating school curriculum by researchers Deutsch, Deutsch, Jordan, and Grallo (1983). Program format entailed fall to spring preschool class with home visits. IDS classes lasted through third grade. Parent participation was strong and active; thus, a parent center was established that held group meetings and assisted parents with individual needs that aided in closing the gaps between community, parents, and school. The program focus was concept formation, language development, perceptual and overall cognitive development, and self-concept. The program served low-income children four years of age for one year.

The study, which examined the effects of a stimulating and enriched school curriculum, was categorized as randomized for high attrition and test scores. Participants entered at age four, with a program length of one year of preschool and then four years of elementary school in grades Kindergarten through grade three for low-income students. Active recruitment was used for participant selection. School staff obtained names from several community sources such as churches, neighbors, and schools. Once student volunteers were identified, the students were identified as an experimental and "self-selected" control group. Initial sample size of the experimental group was 312 students, while the control group had only 191 participants. The follow up group sizes declined to 63 participants in the experimental group and to only 34 in the control group. The students selected had a mean IQ of 92, their mother's education was 10 years and three months, all participants were African American, and 51% were female. As with the other program results, these were positive. Retention rates were 23% for the experimental groups

compared to 43% for the control group. No students in the IDS program were identified for special education. High school graduation rates were not compared because the study stopped following participants at grade seven. The effects indicated positive cognitive abilities (Deutsch, Deutsch, Jordan, & Grallo, 1983).

Philadelphia Project, Philadelphia

The Philadelphia Project was similar to the Early Training Project, researcher Dr. E. Kuno Beller studied the effect of length of school prior to first grade on a student's later development. Children from low-income families were provided four hours of preschool, four days a week, weekly home visits, and fall to summer sessions. The staff at Temple University in the Early Education Department directed the nursery school program. A child development model emphasizing social and emotional growth as well as cognitive development was used. Students' needs and preferences guided the instruction and activities (Beller, 1967)

The study design matched comparable groups from the same kindergarten classes. A control group of 53 kindergarteners age five were selected to mirror the demographic characteristics of nursery school children (Beller, 1967). The study was experimental, with the experimental group containing 60 students initially. Follow-up sizes declined to 44 students in the experimental sample and 37 in the control sample group. It was designed and directed by the Temple University Early Education Department. Participants were from four North Philadelphia public schools, which were in predominately low-income African American neighborhoods. All four schools contained nursery schools. Letters were sent to parents in all four schools to generate a pool of applicants, then four-year-olds were randomly selected from this pool. Characteristics of students included a mean IQ of 91, with the mother's education averaging 10 years and five months. Students were 90% African American and 50% female. Program results

showed retention rates of 38% for the experimental group versus 53% for the control group. Special education placements for both groups were very low, 5-6%. Graduation rates were three percent higher at a 65% rate for the students in the experimental group. Program follow up was conducted at post high school age of 18 years (Beller, 1967).

Harlem Training Project, Harlem

The Harlem Training Project by Dr. Francis Palmer aimed to support the hypothesis that children at age two or three could learn best in one-to-one settings with minimal intervention consisting of two hours a week for eight months. His purpose was to determine if one preschool program had lasting effects on future school performance. The format consisted of one-to-one tutoring or child-directed play, two hours per week, and sessions lasted from fall to summer. Two Intervention modes were used in the program. Concept Training was one model that taught basic concepts such as little-to-big and in and out, in a structured one-to-one setting. The other model was Discovery, which used the same instructional tools as other programs; however, the instructors did not teach or initiate conversations but rather let the children discover.

A unique design study compared groups that were recruited from children born one to two months later. Participants entered at the age of two or three and the program length was one year. Birth records were obtained for over 1500 male students in Harlem and Sydenham Hospitals in 1964 from the months of August through December to obtain participants selection. Those 244 students born in the months of August through October of 1964 were selected for the treatment group. Participant addresses were accessed and parent interviews were conducted. Requirements for the study included lower class or middle-class status, and children had to be at least five pounds at birth and have an English-speaking mother who had no history of drug addiction or venereal disease. Self-selected control groups consisted of 68 students born in

November and December of 1964. The follow up sizes of the two groups declined to 168 students in the experimental group and 51 students in the control group. The students, who were 100% African American males, had mean IQ scores of 92. One positive program result was retention rates, which showed participants with 30% compared to 52% of the control group, a statistically significant rate. Due to follow-up age being grade seven, no graduation rates could be compared (Palmer, 1983).

Curriculum Comparison Study, Urbana, Illinois

The Curriculum Comparison Study focused on evaluating the different approaches of educating low-income children. Researchers Karnes, Shwedel, and Williams prescribed a two plus hours of preschool five days a week with sessions from fall to summer. Participants came from the GOAL preschool program. There were no control groups with this study; instead, five different curriculum models were examined. Dr. Karnes created a curriculum called Game–oriented Activities for Learning (GOAL), which was also known as the Ameliorative Approach. This curriculum was designed to boost cognitive development, specifically in the area of language. Comparable models include Bereiter-Engelmann, Community-Integrated, Montessori, or Traditional Nursery Schools.

The design study was a post hoc comparison group from an original pool. Participants entered the program at age four for one year. Characteristics of the study included students with a mean IQ of 92 and their mother's average education of 10 years and one month. Students were 65% African American and 51% female. Program results showed GOAL students had lower retention rates of 26% compared to 58% for the other students who did not receive GOAL. Special education placement rates were lower for GOAL students as well, with only 32% needing special education services versus 63% for those students who did have GOAL, a

statistically significant difference. A final program impact was graduation rate, where 67% of GOAL students graduated from high school compared to 53% of the non-GOAL graduates. The follow-up age of participants was post high school, or 15-16 years of age (Karnes, Shwedel, & Williams, 1983).

Abecedarian Study, University of North Carolina

The Abecedarian Study conducted by Frances Campbell studied participants that began this program at birth and continued until age five. The targeted sample of the study was low socio-economic children at risk of developmental delay and school failure. The program offered preschool and school-age programs. The preschool was open eight hours a day, five days a week, for 50 weeks. Infant curriculum was focused on enhancing cognitive, language, perceptual-motor, and social development. The older preschooler's curriculum was based on language development and pre-literacy skills. Medical services were provided to children on site. Parent involvement included parents serving on an advisory board, attending voluntary programming on parenting skills, and having access to social services. The school age program provided a Home School Resource Teacher. This resource advocated for parents, assisted in attaining community resources, and provided tutoring.

The design study included a random selection of participants. Participants entered the program at birth and exited upon entry into kindergarten. The comparison or control group did not attend preschool. Characteristics of students were mostly low income and African American (Duncan & Magnesium, 2013). Like Perry, the follow up ages were 12, 15, 21, 30, and 35 years of age (Campbell & Ramey, 1994). Program results were as follows: after five years of age, IQs were close to the national average, the students entered college at 2.5 times more than the control group, and the program reduced teen parenthood and drug use by half. Researchers found that

students achieved higher intellectual performance and academic achievement. Also, fewer students repeated grades or received special education services, and they had higher graduation rates and more attended college than non-participants.

In sum, early intervention versus remediation has been a point of debate for many years, especially when state and federal dollars can fund either strategy. The Consortium for Longitudinal Studies sought strategies to increase IQ scores and improve school readiness. The research-initiated preschools shared data indicating an impact by reducing special education placement rates, retention rates, and increasing graduation rates. Moreover, the level of quality that these preschools followed to achieve these results included smaller class size, trained teachers, prescribed curriculum, and research-based strategies, which were used in all the studies; in some cases, these strategies made a significant impact on the students they served. The researcher-initiated studies illustrated that high quality preschools were successful in increasing student academic success both in the short-term and the long-term. (Erlbaum Associates, 1983)

Next, large scale studies will be examined to discern what impacts early intervention programming had on students. Staffing differences will be taken into account as part of this analysis.

Large-Scale Public Programs

Multi-purpose and variation were a few characteristics of large-scale public preschool programs. The programs contained broad goals that included health and wellness programs and finding employment for parents. These programs used natural variation in public program participation to study the effects of compensatory preschool. Typically, these programs were large scale, not well funded, with fewer staff per child and a less highly qualified staff compared

to research-initiated programs. In addition, these programs were not explicitly created for study. The programs were already in place and were evaluated for effectiveness. Steven Barnett studied the benefits of preschool education. He examined how the effects of routine programs can be considered typical of public programs operating at the time (Barnett, 1992). The next few paragraphs will share examples of large-scale programming and their impacts for students.

New York State Experimental Pre-Kindergarten

Researchers in the New York State Experimental Pre-Kindergarten included David Irvine, who was a specialist in education of the gifted with the New York State Education Department. Co-authors of the program included Mary Horan, David Flint, Susan Kukuk, and Thomas Hick. The program was both state and locally funded. The purpose was to compare families with children in the same district on a waiting list and in other districts with no prekindergarten.

Generally, participants entered the program at age four. Some three year olds attended as well, but not as many, and the programs lasted one year on average, although some lasted two years. Initial sample sizes for this study numbered 1800, much larger than research-initiated programs. The study did not report a breakdown of interventions or comparable group numbers. Participant selection focused on students from low economic status families and special needs, often resulting in overcrowded (Irvine, Horan, Flint, Kukuk, & Hick, 1982). The comparison group included children who did not attend ordinary public preschool. This selection design was seen (by whom?) as problematic because some students were generated by self-selection, other students are drawn from different school districts. The follow-up sample sizes decreased from the initial count; 1348 students were reported in the intervention group and 258 in the comparison group. Program results include a lower special education placement for those

children in the intervention group, with only two percent needing services versus the comparison group, from which five percent were placed in special education. The percentage of students who were retained was lower as well: the intervention group was 16% versus 21% in the comparison group. These findings were considered to be statistically significant. Data was not available for graduation rates due to the follow up being in third grade (Irvine, Horan, Flint, Kukuk, & Hick, 1982).

Maryland Extended Elementary Pre-K

The Extended Elementary Education Program (EEEP) was a pilot program that started in Baltimore City and Prince George's County in 1980 (NIEER, 2016). This program began in prekindergarten and lasted through grade three. The researchers were Eckroade, Salehi, and Wade. Students attended ordinary public compensatory preschool programs in Maryland. The preschool operated two daily sessions with a ratio of 20 children to 2 adults. This program had a curricular focus.

The study compared attenders to non-attenders. Only children born in 1975 and continuously in school district kindergarten to grade five with no preschool prior to age four were considered. Participants entered at age four, and program length varied from one to two years. Sample sizes were much larger than research-initiated studies. Sample sizes reported at follow-up included 356 in the experimental group and 306 students in the comparison group. The comparison group included children who did not attend ordinary public compensatory preschool. This method tended to be problematic because some students were generated by self-selection while other students were drawn from different school districts. Program results showed a decrease in grade retention and special education placement rates. Only 31% of the experimental group were retained, which was smaller than the control group rate of 45%. Special education

placement was 15%, versus the control group's 22%. Due to the time of follow up in fourth grade, high school graduation data was not available (Eckroade, Salehi, & Carter, 1988).

Cincinnati Title 1 Preschool

The Elementary and Secondary Act (ESEA) provided a portion of federal funds to preschools that met Head Start performance benchmarks (Scrivner & Wolfe, 2002). Researchers Nieman and Gastright conducted a longitudinal study that investigated impacts of early childhood programming on long-term educational benefits (Nieman & Gastright, 1981). The program compared full-day kindergarten attendees who mostly had preschool to half-day kindergarten attendees who did not attend preschool (Nieman & Gastright, 1981).

Participants began the program at age four and five and program length was one year. Sample sizes were much larger than research-initiated studies, and sixteen schools that were receiving Title 1 services were included in the study. Participant selection was limited to those students who attended Title 1 preschools, and 688 students were in this group. The comparison group of 524 included those students who did not attend Title 1 preschool and were only enrolled in half-day kindergarten classes (Nieman & Gastright, 1981). The follow-up population decreased to 410 students in the intervention group and only 141 in the comparison group. Program results revealed participants performed better in school with school retention rates of 9% for experimental groups and 12% for the control group. Only 5% of students in the program needed special education services versus 11% of the student who did not participate in the study. Students were followed in grades four and eight, thus graduation rate information was not available (Nieman & Gastright, 1981).

Child Parent Center (CPC) Study, Chicago, Illinois

In 1967, the Child Parent Center Study was designed to provide low-income children half-day preschool, kindergarten, and an elementary follow-up program. This range of students was grades preschool through 3. Reynolds focused on the effects of the Child-Parent Centers (CPC) in inner-city Chicago. The program examined long-term effects on participants.

The study was 25 years long and involved almost 1400 participants. The follow up size decreased to 757 in the experimental group and 130 in the control group. A positive effect included higher test scores through middle school. Significantly fewer participants were arrested for delinquency and crimes. There were significant reductions in special education placements, a 10% reduction, and retention rates at a 15% reduction. The high school graduation rate was 49.7% versus 38.5%, significantly higher than non-participants of the CPC with an 11-point increase (Reynolds, 2000).

In sum, the large-scale studies yielded results on the impact of preschool. The studies assessed IQ and achievement, like research-initiated programs. The experimental Pre-K programs had favorable effects on cognitive development and maintaining normal progress through grade three by limiting the need for special programs (Irvine, Horan, Flint, Kukuk, & Hick, 1982). Most of the studies reported retention rates and special education placements. Graduation rates were often not reported due to limited follow-up, compared to research initiated studies, many of which tracked participants through high school and some into adulthood. The smaller sample size in research initiated studies made it easier to track participants versus the large-scale ones which consisted of much larger experimental groups.

Preschool programs begin to expand to state-sponsored programs that focused on components gleaned from the research based and large-scale programs that provided both short and long term positive impacts on students served. In the next section, Head Start will be

presented to further emphasize the impact of preschool and how programs are monitored to ensure high quality.

Head Start Programs and Studies

Head Start programming began in 1965 (Duncan, & Magnuson, 2013). The purpose was to provide early childhood programming to less fortunate American children (Vinovskis, 1993). African-American students made up the majority of its participants. Initially, Head Start was a summer program (Gallagher, Clifford, & Maxwell, 2004). The program served disadvantaged students with the goal of improving the ability to level the playing field with their more advantaged peers (Currie, 2001). It is the largest national public preschool program for four year olds (Scrivner & Wolfe, 2002). Head Start was administered by the Administration for Children and Family within the US Department of Health and Human Services. Head Start has served more than 30 million students nationwide (What Works Clearinghouse, 2015). All programming was administered at the local level. Providers could be not-for-profit organizations, local school systems, or community organizations.

Head Start was not only an educational program (Vinovskis, 1999). Five of its performance measure objectives included: enhancing children's growth and development; strengthening families as the primary nurturers of their children; providing children with educational, health, and nutritional services; linking children and families to needed community services, and ensuring well-managed programs that involve parents in decision-making (Henry, Gordon, & Richman, 2006).

Since Head Start was a government-funded program, evaluation of its effectiveness began just three years after its implementation. The Westinghouse/Ohio study was conducted in 1968. The study indicated that gains in IQ were small and faded quickly (Vinovskis, 1999).

Edward Ziegler, one of Head Start's knowledgeable supporters, admitted after viewing the report that he felt the overall program was not as effective as it could have been (Zigler & Muenchow, 1992). In the next sections, more information will be shared on various Head Start studies and their impact on the students they served.

Experimental Variation of Head Start, Louisville, Kentucky

Not long after Head Start was implemented in Louisville, an evaluation was requested and conducted by the Urban Studies Center at the University of Louisville. Louise Miller conducted this research. The one-year program served students who were four years old. Four different programs were implemented within the Louisville program: the traditional Head Start, Bereiter-Engelmann, Montessori, and DARCEE (Demonstration and Research Center for Early Education).

Four target areas in Louisville were selected for the study. The design did not gather IQ test results for this study. The mothers' mean education was 10 years, seven months. Ninety two percent of the participants were African-American and 51% of the participants were female. The 116 students in the experimental group were randomly assigned to a Head Start class or an experimental class. The control group had 24 students and originated from the same neighborhood as their experimental peers. The sample sizes in the follow up study decreased slightly to 102 students in the experimental groups and 19 students in the control group. The experimental group had a retention rate of 10% compared to a 16% retention rate for the control group. Only 13% of the experimental group needed special education services. Their peers in the control group had a higher percentage, 15% needing special education services. Due to the fact that the follow up study ended at grade seven for this group, there was no graduation data available to assess this group's long-term academic success (Miller, 1983).

The New Haven Project, Hamden, Connecticut

The New Haven design compared children who attended a Head Start program versus children who did not attend Head Start. The study began in 1967. Researchers Victoria Seitz, Nancy Apfel, Laurie Rosenbaum, and Edward Zigler studied 61 students who attended Head Start and were then placed in Project Follow Through kindergarten programs. The program included individual instruction, social emotional development, and the teaching of principles and concepts.

The design's control group consisted of 48 students who attended non-Follow Through programs. Students in the control group were a blend of students who had attended a Head Start program and some who had not attended Head Start. The follow up sample size was 35 students in the experimental group and 26 in the control group. Retention results were lower for students who had attended Head Start: only 18% of the students were retained versus 35% for those students who did not attend Head Start. These differences were statistically significant (Seitz, Apel, Rosenbaum, & Zigler, 1983).

Westinghouse National Evaluation of Head Start

Researchers from the Westinghouse Learning Corporation and Ohio University initiated one of the first major studies of Head Start. The research director for this study was Victor Cicirelli.

The study compared first, second, and third-grade students who had attended Head Start. The control group consisted of students who did not attend Head Start. African American students made up the majority of its participants. The experimental group had 1980 students and the control group had 1983 children. Conditions for the evaluation included data collection, cognitive evaluations, and experimental and control groups. The study collected data on

graduates of the summer program and full year programs that took place in 1965, 1966, and 1967. Various measures of assessment were used to study the affective and cognitive progress of the students. The control group was set up three years after the initial program began. The research design was random, with a Head Start and non-Head Start group. The study was completed within a year of its inception. No retention rates, special education placement comparisons, or graduation rates were shared or calculated. Positive results were found with Head start graduates scoring better on the Metropolitan Reading Test than their non-Head Start peers. Also, the African American subgroup was found to have been positively impacted from attending Head Start (Cicirelli, 1969).

Preschool programs began to expand via state sponsored initiatives that utilized components gleaned from the research based and large-scale programs that provided both short and long term positive impacts on students served. The next section presents various configurations of state-funded preschool programs to further emphasize the importance of preschool and how programs are evaluated to ensure high quality.

State Funded Preschool Policy and Studies

While Head Start studies and large-scale programs had mixed findings on the impact of preschool, state leaders saw the benefits of research-initiated studies such as the Perry Project and Abecedarian Study. In 1989, state-funded preschool programs were in 27 states. By 2002, 40 states were funding preschool (Zigler, Gilliam, & Jones, 2006). The previous sections shared studies based on research models that focused on specific strategies or targeted at-risk populations that may or may not improve a child's academic success in K-12 education. State-funded preschools sought to accomplish the same task while providing all students the opportunity to start school equipped with the skills necessary to succeed (Zigler, Gilliam, &

Jones, 2006). The goal was to build a learning foundation that was high quality, developmentally appropriate, and comprehensive in scope, targeting the cognitive, physical, and the social-emotional domains of development (Zigler, Gilliam, & Jones, 2006). Table 2.2 shows the evolution of preschool programming.

Table 2.2 Timeline of Preschool Education in the 20th Century

Year	Event
Late 1800's	Wisconsin allowed public schools to enroll four year olds in kindergarten and claim state aid
1903	New Jersey allowed public schools to enroll four year olds in kindergarten and claim state aid
1949	Pennsylvania allowed kindergartners to be 4 to 6 year olds but did not provide any state funding
1960	10% of nation's children were enrolled in some type of 3 or 4-year-old preschool program.
1970	20% of preschool children were enrolled in some type of program yet the vast majority of these programs were private and paid for by the parents.
1990	Preschool participation was over 70%
2001	27 States funded some type of preschool program
2016	44 States fund some type of preschool program

Note: 1-3 Mitchell (2001), 4-5 Barnett (2010), 6. Barnett (2010) and Zigler, Gilliam, & Jones, 2006. 7. Zigler, Gilliam, & Jones (2006) 8. NIEER, 2016

The state-funded programs began within various contexts. Some were half day while others were full day programs. Program length included summer programs, while most occurred during the academic school year. Also, states varied in their program design and quality benchmarks. The design quality relied on teacher education qualifications, class size guidelines, inclusion of standards, and other health and safety-related standards. Not all states required teachers to have a bachelor's degree or early childhood training (Groark, Mehaffie, McCall, &

Greenberg, 2007). In most states, only four year olds were served. Local school districts and private and public centers were sites for prekindergarten. The targeted population included poverty, low parent education, and English as a second language. Some programs were open to all students (Zigler, Gilliam, & Jones, 2006). Public sentiment as reported by the National Institute for Early Education Research (NIEER) in a 2003 poll showed 90% of respondents agreed with the need for state-funded and universally accessible preschool (Barnett, Robin, Hustedt, & Schulman, 2003). The next section will describe one type of preschool programming for all students, which was often called Universal PreK (UPK).

Universal Pre-Kindergarten (UPK)

Universal Pre-Kindergarten (UPK) started in the early 1990's. UPK's are state funded preschool programs for all children regardless of parent income (Gormley, 2005). The programs are not compulsory but rather voluntary and free of cost. UPK provides preschool services at a variety of locations: public schools, Head Start centers, private child care centers, faith-based centers, and other non-profit centers (Bassok, Fitzpatrick, & Loeb, 2013). The concept of offering universal preschool in all states was proposed in 2008 by then-candidate Barak Obama. Also, many believed public schools could succeed if preschool were provided, so when students entered kindergarten they would be ready to learn. Teachers could further shape students into productive citizens and leaders if students came to school ready (Zubrzycki, 2011). Parents wanted UPK to prepare their four year olds for school and viewed preschool as a public good versus a private luxury (Gormley, 2005). By arriving at school a year earlier, students will be ready to learn when starting kindergarten.

Each state varied on their level of implementation. The following section provides information on how each state started the process and areas they focused on. It highlights the

states that serve the highest percent of four year olds. The highest state served 81%, followed by several that served close to 50% (NIEER, 2016).

Georgia

The first state to provide UPK to all four year olds was Georgia. In 1995, any child could attend preschool regardless of income. Earlier (1965) children who were identified as at-risk for not having the necessary readiness skills were provided state funded preschool (Zigler, Gilliam, & Jones, 2006). State lottery funds supported (and continue to support) the program. In 2015, 59% of the four year olds in Georgia attended a UPK. Program sites varied from public schools, private child care centers, faith based organizations, Head Start agencies, state colleges and universities, to military facilities (NIEER, 2015). Georgia's program provided UPK only to four year olds (NIEER, 2015) and served 60% of the state's population of four year olds in 2016. The Georgia program can be found in all school districts. The program is full day (six and a half hours), was in operation five days a week, and operated on an academic year (NIEER, 2016).

Oklahoma

In 1980, UPK began in Oklahoma as a pilot project. By 1990, the program opened to all eligible four-year-old Head Start students. In 1998, Oklahoma became the second state to offer a UPK model. A notable achievement was that it had the highest state preschool attendance rate in 2002, with 60% of the state's four year olds attending UPK (Zigler, Gilliam, & Jones, 2006). This program was offered in 99% of school districts. Like Georgia, Oklahoma did not offer UPK to three year olds. The programs could be based in child care centers, Head Start settings, and community-based programs as long as a public-school teacher was placed there to administer the programming (NIEER, 2015). In 2016, 74% of the four-year old population attended UPK. The

program ran for two and a half hours a day, five days a week. The calendar aligned with the academic year (NIEER, 2016).

West Virginia

Unlike other states, West Virginia's state-funded programs served both three and four year olds. The age and at-risk level of each student was determined at the local level. In 2012, all four year olds could attend for free. Only three year olds who were identified as special needs attended for free (Zigler, Gilliam, & Jones, 2006). The percentage of four year olds served was 66% and the percentage of three year olds served was 81%. The programs operated a minimum of 14 hours per week for four to five days a week. The schedule was an academic year. All school districts in West Virginia offered UPK (NIEER, 2016).

New York

In 1997, New York began its preschool experiment, only serving low-income students because budget restrictions limited programming. At that time, only 26% of population could be served (Zigler, Gilliam, & Jones, 2006). The goal was to offer prekindergarten education to all four year olds in the state, regardless of family income or risk factors. In 2016, 50% of all four year olds attend Pre-K. The program operated for two and a half hours a day, five days a week. The schedule followed the academic year with 68% of school districts offering the program (NIEER, 2016).

District of Columbia

Every elementary school in the District of Columbia had a UPK program. The programs were available to everyone, but there were waiting lists at some schools (Gormley & Phillips, 2005). The district began offering pre-k in the 1960s. The District of Columbia had the highest percentage of four year olds attending government sponsored UPK at 81%. The programs were

offered in 55% of school districts. There was also funding for three year olds. In 2016, 70% of three year olds attended state sponsored pre-k as well. The program operated six and a half hours a day for five days a week. Its schedule followed the academic year. Of 51 entities, the District of Columbia is ranked first for Pre-K access for both three and four year olds (NIEER, 2016).

Florida

The goal in Florida was UPK for all four year olds. Initially, there were controversies with how to pay for preschool, adopting standards that were too low, and students not achieving school readiness benchmarks (Zigler, Gilliam, & Jones, 2006). The Voluntary Prekindergarten Program (VPK) began in 2002. VPK offers two models: a five-hour daily summer program or a three-hour daily program during the regular school year (Burke, 2009). Currently, all school districts in the state offer preschool. The state served 76% of four-year olds (NIEER, 2016).

Wisconsin

In 1848, Wisconsin's Constitution contained a provision to provide free, voluntary preschool education to four year olds. School districts did not have to offer preschool, but if they did, it had to be open to all age eligible students. There were 413 school districts in Wisconsin and currently 399 districts offered UPK. This equated to 71% of four year olds receiving preschool. Operating schedules were determined locally as long as a minimum of two and a half hours a day was provided (NIEER, 2016).

Vermont

Vermont began funding preschool in 1987. Initially a grant was created to offer preschool education to at-risk children ages three to five. By 2014, legislation was passed that allowed school districts to provide UPK to children ages three to five who were not enrolled in kindergarten. The programs operated for at least ten hours per week and followed the academic

school year calendar. By 2016 in Vermont, 67% of four and 44% of three year olds respectively attended UPK (NIEER, 2016).

Iowa

In 1989, Iowa began providing preschool services to three, four, and five years olds through the Shared Visions program. This program targeted low-income families. In 2007, The Statewide Voluntary Preschool Program began. This program allowed all four-year-olds in the state to attend preschool. Minimum hours offered had to be at least ten hours a week and operated on academic or school year calendar. Almost every school district offered the program; currently 96% of them provided preschool. The percent of four-year-olds attending Iowa's preschool was 62% (NIEER, 2016).

Nine other states including Alabama, Maine, Massachusetts, Minnesota, Mississippi, Missouri, Nevada, New Jersey, and New Mexico offered UPK. These programs served anywhere from four to forty percent of states' four-year-old population. Even though they claimed to be "Universal" in order for these states to provide four year olds "free" preschool, they often had to match funds locally or apply for competitive grants. A few of these states began preschool within the last year or two (NIEER, 2016).

The next section will outline another type of state preschool that is currently used in more states than UPK. State funded preschool for low-income students is seen as a greater need than PreK for all children because they typically have less access to early childhood programs.

State Funded Preschool for Low-Income Students

In twenty states, preschool for low-income students was offered to all eligible four year olds. The criteria for free preschool varied. Some states required qualification for free or reduced lunch, homelessness, foster care, parent on active military duty or who was injured or killed on

active duty, or English as a second language. Figure 2.1 shows the states that provided preschool to students who met the Federal Poverty Level Standards (FPL).

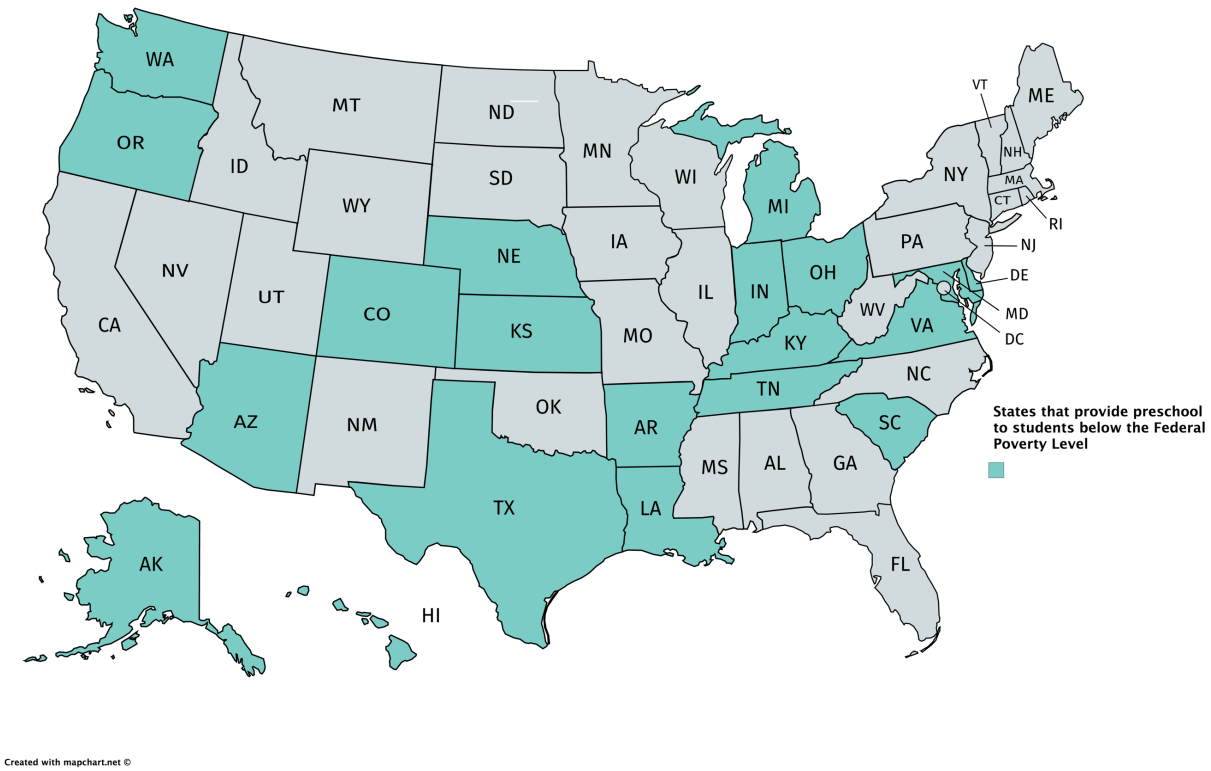


Figure 2.1 States that provided preschool to students below the poverty level

When using the Federal Poverty Level formula, many states utilized the Child Care and Development Fund (CCDF), which was part of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996. This act funded childcare assistance to families who were receiving Temporary Assistance to Needy Families (TANF) or who were in the process of transitioning off public assistance or low-income working families. States received these federal funds in accordance with funding levels and guidelines for income level (Scrivner & Wolfe, 2002).

State Funded Preschool for State Median Income

Only three states used a state median income formula to provide state funded preschool. These models could be found in California, Connecticut, and North Carolina. The income formulas prevented universal preschool (NIEER, 2016). California began state-funded preschool programming in 1998. The First Five initiative was passed, which provided funds for child development from birth to age five. Many California counties used the money for preschool. For example, Los Angeles created a plan to offer UPK and expanded the program as more funds became available (Zigler, Gilliam, & Jones, 2006). Connecticut targeted only high-risk children (Zigler, Gilliam, & Jones, 2006). State funds provided PreK to certain geographic areas, such as specific cities or towns (Mitchell, 2001). North Carolina's program Smart Start was launched in 1993 (Scrivner & Wolfe, 2002).

State funded preschool has impacted the lives of many four-year olds, yet there is much work to be done. Seven states still lack a state-wide preschool program: Idaho, Montana, New Hampshire, North Dakota, South Dakota, Utah, and Wyoming. In addition, there was lack of support for dual language learners in our nation's preschools. Only 22 states provided some level of support, and just four states required certified dual language preschool teachers.

State-funded preschool looks different in almost every state. The level of funding, age of children served, as well as quality of programming varied greatly. Overall, the majority of the states are allocating funds to intervene early and provide opportunities to students who could benefit from early childhood programming that is free and high quality.

NIEER compiles a yearbook on the state of preschool. This publication began in 2002. The data are generated from the National Center for Education Statistics (NCES).

(http://nces.ed.gov/pubsearch/). The yearbook contains comprehensive information on state funded preschool program. The report breaks down the various factors such as programming standards and polices, as well as funding information and student enrollment demographics. The data in the tables is from the 2015-2016 school year, unless otherwise noted. Table 2.3 highlights NIEER's 2016 Preschool Yearbook standards checklist. The policies listed align with PTQ Level 3 and 4 standards. The table shows out of the 59 state programs what policies are shared or vary with PTQ.

Table 2.3 National Quality Standard Checklist Summary

POLICY	Of the 59 state-funded pre-K initiatives, number meeting benchmarks
Early learning & development standards	59
Teacher degree	35
Teacher specialized training	51
Assistant teacher degree	19
Staff professional development	49
Maximum class size	47
Staff-child ratio	49
Monitoring/Continuous quality improvement system	42

NIEER 2016

Table 2.4 State Policy Requirements

POLICY	STATE PRE-K REQUIREMENT
Early learning & development standards	Current: National Education Goals Panel content areas covered by state learning standards for preschool-age children must be comprehensive New: Comprehensive, aligned with state infant & toddler and K-3 or college & career ready standards, aligned with child assessments, culturally sensitive, and supported
Teacher degree	Current & New: Lead teacher much have a BA, at minimum
Teacher specialized training	Current & New: Lead teacher must have specialized training

	in a pre-K area
Assistant teacher degree	Current & New: Assistant teacher must have a CDA or equivalent, at minimum
Staff professional development	Current: Teacher must receive at least 15 hours/year of in-service professional development and training New: Teacher and assistant teacher must receive at least 15 hours/year of in-service professional development and training, individualized professional development plans, and coaching
Maximum class size	Current & New: Maximum number of children per classroom must be 20 or fewer
Staff-child ratio	Current & New: Lowest acceptable ratio of staff to children in classroom (e.g., maximum number of students per teacher) must be 1:10 or better

NIEER 2016

Based on the NIEER research of the quality standards checklist, Indiana was rated as meeting three of the eleven. Those standards were early learning and development, staff professional development, and monitoring continuous quality improvement systems.

Coaching services or mentors were provided to preschool staff and programs in many states. According to the NIEER The State of Preschool Yearbook for 2016, many states offered these services. Table 2.5 shows the offering states and what services they provide. Indiana offers this service to PTQ programs. Participants responded positively to the services the coach provided. His role was discussed and shared as well. The table includes states that offer some type of coaching or mentoring programs. The descriptions of each states programs are listed and illustrate similarities and differences.

Table 2.5 State Preschool Programs with Coaching or Mentoring

States with Coaching Services	Description
Alaska	Coaching and mentoring services are being piloted to some lead and assistant teachers on a voluntary basis. Alaska uses the My Teaching Partner Coaching System and currently has 27 teachers enrolled.
Arizona	Coaching is provided to all programs participating in Quality First Scholarships. The coaching can be used to support teachers, assistant teachers, and administrators. While the coaching is required, the audience receiving the coaching is not dictated by the state.
Georgia	Coaches observe each teacher monthly. They conference with the teacher on the same day to identify and discuss the effective interactions from the Instructional Support domain of the CLASS observational tool. The number of teachers assigned to a coach can vary depending on the type of coaching model being implemented.
Illinois	Coaching is provided to teachers in PFA classrooms based on the monitoring report for that PFA program. However, coaching is not required by state policy.
Iowa	Program standards state that mentoring, coaching, and professional development must be included in a program's professional development plan, but it is locally developed.
Kentucky	Technical Assistance includes the use of higher education faculty who were provided stipends for their time.
Massachusetts	Coaching or mentoring opportunities are available for nonpublic employees through the state's Educator Provider Support Grant, but not required.
Michigan	All classrooms are assigned an Early Childhood Specialist (ECS, i.e., master's level coach). The requirement is that each ECS is to be in the classroom for a minimum of three times per year. However, the reality is that ECSs are in the classroom anywhere from weekly to monthly depending on the needs of each teaching team. Classrooms with new lead teachers receive more frequent visits. Classrooms with lower Program Quality Assessment (PQA) scores or other concerns also receive more attention. See http://www.michigan.gov/gsrp for Implementation Manual and Early Childhood Specialist section for details.

Nebraska	Coaching is provided to district classrooms that participate in the state QRIS or are Pyramid Model full implementation sites.
New Jersey	Coaches are provided at a ratio of one coach for 20 classrooms. Master teachers are provided at a ratio of one to 18 classrooms.
North Carolina	The amount of mentoring/coaching that a NC BK licensed teacher receives is based on formally assessed needs that result in different types of professional development plans, including specific strategies designed in collaboration with the teacher, evaluator, and site administer (private sites). Teachers need different amounts of onsite coaching/mentoring (scaffolding, role modeling, etc.)
Rhode Island	The state contracts with a vendor who is available to provide in program/classroom support as well as large group support.
Wisconsin	Coaching and mentoring is built into the state teacher licensing system for teachers who elect to use a professional development plan (instead of credit-based license renewal) and in the teacher effectiveness process. For additional information, see: http://dpi.wi.gov/ee

NIEER 2016

The next section highlights systems that monitor early childhood programming to ensure students are getting a high-quality education.

National Preschool Accreditation

In order for states to have received state funds for preschool, they had to achieve a level of preschool quality as measured by standards and/or accreditation. In Indiana, schools seeking PTQ Level 4 must attain national accreditation. Quality rating and improvement systems (QRIS) are unique in each state and have been developed in twenty-six states for preschool programming (Elicker, Ruprecht, Langill, Lewsader, Anderson, & Brizzi, 2013). National accreditation organizations differed from state programs in that they promoted higher standards than state accredited programs. States are not required to achieve national ratings, yet some states can achieve this status as part of their individual state requirements. Table 2.6 below shows a sample of nationally accredited systems and the age groups they served. The table highlights similarities

such as requirements in applications, fees, and onsite verification visits. The differences appeared to be in that some require self-studies, portfolios, evidence and documentation, and candidacy and merits. The age levels served varied, with most including preschool and school-age children. The range included infants all the way to adult care.

Table 2.6 National Quality Rating and Improvement Systems

Organization	Accreditation requirements	Age levels
Accredited Professional preschool learning environment (APPLE)	Application, fees, self-study, portfolio, and onsite verification visit	Preschool and school age
American Montessori Society AMS	Application, fees, self-study, evidence report, and onsite verification visit	Birth to high school
Association of Christian Schools International	Application, fees, self-study, candidacy status, and onsite verification visit	Preschool and school age
Council on Accreditation COA	Application, fees, self-study, evidence report, and onsite verification visit	Preschool, school age, foster care, adult day care
National Accreditation Commission for Early Care and education programs NAC	Application, fees, self-study, and onsite verification visit	Child care centers only
National Association for the Education of Young Children NAEYC	Application, fees, self-study, candidacy status, and onsite verification visit, portfolios	Infants, toddlers, preschool and kindergarten

National Association for Family Child Care (NAFCC)	Application, fees, self-study, evidence and documentation report, and onsite verification visit	Infants, toddlers, preschool, and school age
National Early Childhood Program Accreditation (NECPA)	Application, fees, self-assessment, action plan, portfolio, and onsite verification visit	Infants, toddlers, preschool, and school age

It was important for schools to know these requirements prior to seeking QRIS ratings (Elicker, Ruprecht, Langill, Lewsader, Anderson, & Brizzi, 2013).

The goals of these national accreditation programs varied. Most included providing guides to parents that informed them of child care quality, encouraged providers to improve quality of childcare, and improved/supported the importance of school readiness and early childhood development through quality checklists. There were five basic functions included: quality standards, a monitoring system, support for quality improvements, a financial stipend to entice child care providers, and a communication process for sharing quality levels with parents and community. Evaluations of these systems were still in the developmental stage. Only a few states have completed or were planning an evaluation (Elicker, Ruprecht, Langill, Lewsader, Anderson, & Brizzi, 2013).

The accreditation standards that schools have to meet can be categorized into indicators. Assessments must be administered and reported for publication. Professional development hours must be completed annually. National accreditation by one of the organizations in Table 2.3 must be achieved and maintained. On-going parent-teacher communication must be documented. The following must be included: process quality, program policies, provisions for children with

special needs, state regulation, structural quality, and teacher education/training (Elicker, Ruprecht, Langill, Lewsader, Anderson, & Brizzi, 2013).

Education programs were constantly evaluated. A critical question is asked, "How did states evaluate early childhood programs funded by public dollars?" (citation) Policymakers sought guidance from professional organizations that provided data and analysis when making decisions on how to allocate public funds. Organizations that provided national quality standards for public preschool included: the American Public Health Association, the American Academy of Pediatrics, the National Association for the Education of Young Children (NAEYC), and the National Institute for Early Education Research (NIEER). Each of the organizations had a unique set of standards that provided structural and procedural components for early childhood programs (Pianta, Barnett, Burchinal, & Thornburg, 2009). In the next section, information is provided on the various national accreditation systems, the age of students served, and what criteria had to be met to achieve each organization's accreditation.

Of the organizations that provided early childhood standards, all emphasized teacher credentialing and teacher pupil ratio. The NAEYC focused more on structural standards while NIEER considered both structural and also service provision, which provided things like student meals, health screenings, and home visits. Standards provided a framework for programs and criteria for evaluation purposes.

Statewide QRIS

Statewide quality rating and improvement systems were used to assess, improve, and communicate the level of quality in early and school age settings in twenty-five states. In addition to the prescribed QRIS, twenty-one of these states included national accreditation in their processes. Indiana's QRIS utilized both a QRIS and a national accreditation in their

programming. The following paragraphs describe the process an Indiana school had to go through to achieve this status.

Paths to Quality (PTQ)

The Paths to Quality (PTQ) quality rating and improvement system measured the program quality of early childhood education in public schools in Indiana. Originally, PTQ was created for daycare centers (Elicker, Ruprecht, Langill, Lewsader, Anderson & Brizzi, 2013). Indiana's QRIS, PTQ, was created in the late 1990's in Ft. Wayne. PTQ is a free, voluntary Tiered Quality Rating and Improvement System (TQRIS) designed to raise the standard of quality in early childhood education in Indiana. Paths to Quality included four levels with each level having progressively higher standards. From 1996-1999, programming for PTQ was created and implemented. From 2000-2007 child-care provider participation reached 60% in the Ft. Wayne region. In 2005 Purdue University completed the first evaluation of Indiana's QRIS system for the southeastern region. By 2006, the Division of Family and Social Services Administration and the Bureau of Child Care began discussions to expand PTQ statewide. The goal was to improve the quality of child-care. PTQ enabled early childhood centers to highlight their efforts using quality standards (Elicker, Ruprecht, Langill, Lewsader, Anderson, & Brizzi, 2013).

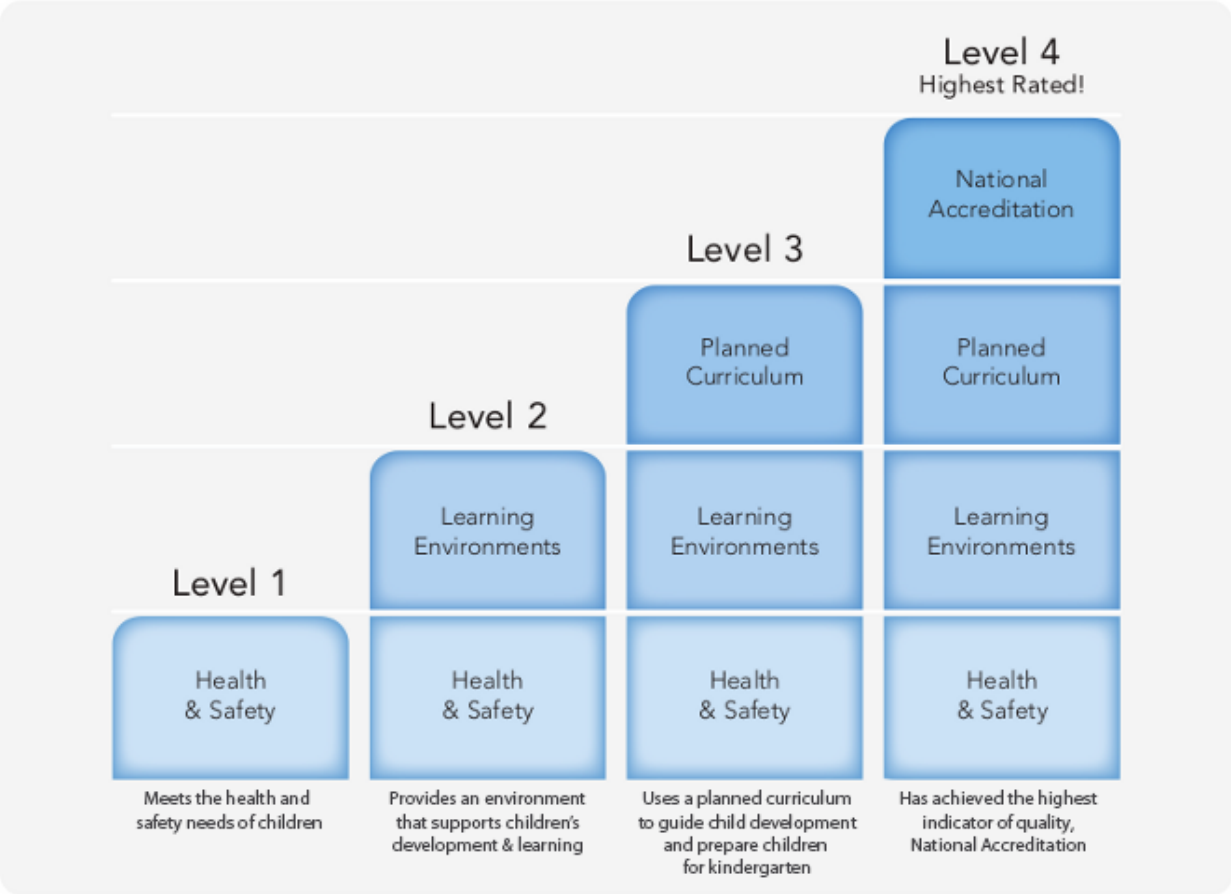


Figure 2.2 Indiana Paths to Quality Levels

In order to qualify for state funding, public schools had to meet Level 3 or Level 4 in Indiana's Tiered Quality Rating and Improvement System for Pre-K, which was referred to as PTQ (See Figure 2.2). This accreditation system started in 2014, when the IDOE partnered with the Family and Social Services Administration (FSSA), Office of Early Childhood, and Out of School Learning. The leveled system had minimum standards for each tier. As a school advanced through each tier, all requirements of the lesser tier had to be met in addition to those of the next tier for accreditation. The actions needed to acquire each level are formulated based on each level's focus. Level 1 meant public preschools had to meet minimum health and safety

standards and had to have developed health and safety procedures and policies. Level 2 required schools to provide five areas reflecting best practice. These included: a nurturing learning environment, a variety of learning materials, language and literacy curriculum for skills development, program information for families, and professional development for staff.

In order for public schools to have received state funding for Pre-K, Level 3 or 4 must be obtained first. Level 3 required schools to have a planned curriculum, evidence of professional growth of all staff including administrators, input from families and staff on programming, a strategic plan, and proof of working towards national early childhood accreditation. Finally, a school reached Level 4 by meeting the standards for quality early childhood education, and a school administrator agreed to aide other programs through volunteer mentoring (IDOE. 2018b).

PTQ was achieved when providers participated in a verification visit and were evaluated using program standards. There were four levels, and each level built on the foundation of the previous level(s). Providers could start at Level 1 and work their way towards national accreditation at the highest level, Level 4. These accomplishments resulted in substantial quality improvements for early childhood programming. Once a PTQ level had been determined, annual verification visits were required. New ratings could be determined six months after the initial or previous assessment (Elicker, Ruprecht, Langill, Lewsader, Anderson, & Brizzi, 2013). The following paragraphs highlight the four levels and key factors that had to be attained at each level.

Level 1 centered on health and safety compliance. Providers voluntarily chose to be a part of Paths to Quality. Their philosophy focused on providing quality early childcare and education. Key features of Level 1 included ensuring all staff are trained in first aid and one staff

member is certified in CPR. Also, an appropriate staff-to-child ratio is maintained. Finally, the provider agreed to meet high standards of care including the holding of a state childcare license.

Level 2 providers included health and safety guidelines, as well as appropriate learning environments. Providers had demonstrated a commitment to improved program quality by creating programs that offered environments supportive of children's growth, development, and learning. Level 2 programs had a consistent daily schedule, planned activities for children, and provided relevant program information to families. The daily schedules provided adequate time to meet the child's age and ability. A variety of learning opportunities were provided, including reading, puzzles, art, and outdoor playtime. Families and parents received a handbook that outlined the discipline and illness policy, program philosophy, and learning goals for students. Program providers attended trainings and professional development and had to earn an early childhood degree or other relevant credential.

Provider Eligibility Standards (PES) are included in Indiana Statute IC 12-17.2-3.5. Certain basic health and safety standards must be met. There are 20 requirements that can be divided into three distinct categories: staff, center, and policy. Staff requirements included tuberculosis testing for all staff; annual first aid certification; CPR training for one staff member; formal orientation for all employees; alleged perpetrator, child abuse, and neglect data-base checks; national criminal history checks; and national fingerprint criminal history search. Site requirements included emergency plans, safe environments, and a point-of-sale machine to track student attendance and pay for services. Policy requirements included up-to-date immunizations for all students, minimum age requirements for staff, monthly fire drills, and handbooks for supervision, discipline, and hand-washing.

In order for centers or programs to receive Child Care Development Funds (CCDF) through the voucher system, they had to have completed twenty requirements. The requirements were voluntary to all early childhood centers, programs, and out-of-school programs. Only programs seeking public funds needed to address these standards. If schools did seek PES, they automatically met the requirements needed for Level 1 of Paths to Quality (Indiana Family & Social Services Administration, Provider Eligibility Standards (PES) Packet).

Level 3 centers met health and safety compliance, positive learning environments. and a planned curriculum. In order to achieve Level 3, providers must have implemented a curriculum that supported children's learning and school readiness. Indiana Early Learning Foundations was Indiana's Early Learning Development Framework, which had been aligned to the 2014 Indiana Academic Standards. These standards were the result of a collaborative effort between the Indiana Department of Education, Family and Social Services Administration: Office of Early Childhood and Out of School Learning, and the Early Learning Advisory Committee (IDOE, 2018b).

In Indiana, the Early Learning Foundations were aligned to both the Indiana Academic Standards and the Common Core Standards (IDOE, 2018b). The purpose of the standards was to create common language and expectations. The Foundations allowed teachers to evaluate their curricula for strengths and weaknesses. They also allowed for flexibility to individualize instruction. By breaking down the Foundations into a user-friendly format, educators focused on specific topics, age range, or indicators. The topics provided essential concepts and skills all preschoolers should know or be able to demonstrate. Age ranges included infant, younger toddler, toddler, older toddler, preschool, and older preschool. Indictors describe how children can progress through essential competencies.

A final component of Foundations was that the kindergarten standard counterparts were included in all Foundation topics. This allowed teachers to see what each preschooler would need to know when entering kindergarten. The following content areas were included in the Foundations: English/language arts, mathematics, social emotional skills, approaches to play and learning, science, social studies, creative arts, and physical health and growth (IDOE, 2018b).

Level 3 programs made a significant investment in the professional development of their staff, and they incorporated family and staff stakeholders in their programs. Teachers and staff created learning plans based on a child's age, ability level, and developmental stage. Learning plans focused on social, emotional, and mental development, which included language and pre-reading skills in order to show school readiness. Active learning was another key component of Level 3, including group and individual play time and time with books. Annual family conferences were held to provide families with important information about their child's progress and development. Teachers and staff were required to obtain early childhood credentials or degrees in addition to regular training to attain Level 3.

Level 4 required all levels of Paths to Quality, including national accreditation through the IAEYC. National accreditation was the highest rated program and had to demonstrate a commitment to the highest level of professionalism in quality early care and education. Because Level 4 providers committed to the highest level of programming, their learning environments offer social, emotional, physical, mental, and creative developmental activities. All teachers and caregivers were degreed and credentialed. A final requirement of Level 4 attainment was for providers to mentor other childcare providers.

Indiana's QRIS system of PTQ not only provided families an option to pursue in terms of early childhood programming; it also challenged schools and centers to ensure Indiana students were receiving the best services available (http://childcareindiana.org/levels).

More information was needed for Indiana school leaders and educators to make informed decisions on whether or not to pursue PTQ. PTQ was a new program that public schools could seek to acquire not only high-quality recognition but also to provide funding solutions that currently did not exist in the school funding formula. Thus, it was vital that more research was available in terms of what a school must go through to acquire this distinction.

The increased rigor of K-12 education has mandated the need for high quality preschool. Students entering kindergarten must be able to do what previous standards required. Indiana had many preschool programs, yet many do not meet the high-quality standards required to make students kindergarten ready. Early Learning Indiana reported that less than one-third of students in Indiana received programming that met PTQ Level 3 or 4 (IN.gov, n.d.).

PTQ was a QRIS that may increase the readiness level required to successfully prepare students for the newer rigorous standards. The PTQ model was designed to reflect the education of the whole child model by focusing on their social, mental, and academic needs. This initiative allowed schools to build a stronger foundation of services by expanding their level of instruction to include the state's preschool population.

Summary

High quality preschool programming in public schools was multi-faceted and diverse. At the time of this writing, the number of state-funded programs was on the rise and becoming more readily available. How schools achieve public funding and quality distinction was still unknown

and new to many. Even though preschools have been around for hundreds of years, the programming and quality vary.

The work of theorists such as Piaget, Dewey, and Vygotsky tested many strategies regarding early child development that are still utilized today. Active learning was stressed by Dewey. This concept urged adults to focus on the whole child and teach learning through life experiences. Piaget believed children learn through stages. His four stages of development assist educators in creating content that is appropriate for preschoolers based on stages of child development related to their age. Vygotsky focused on the cognitive development theory that utilized socially relevant tools to increase learning and development. Each theorist developed vital concepts regarding classroom environment, curriculum, and teacher roles that mirror many high-quality preschool programs today.

As education reform began to take root, preschool became a target as well. The impacts of preschool were just as important as K-12 programs. This movement not only created studies that highlighted the benefits of preschool, it also increased its popularity. Preschool studies such as the Perry Preschool Project and many others provided high-quality early education programming to all students, including disadvantaged students, and have contributed to greater K-12 success. Other programs such as Head Start were implemented to support disadvantaged children and were then studied to help determine their impacts as well their return on investment.

The continuation of education reform encouraged many states to follow Head Start's lead and offer preschool to disadvantaged students. By doing this, states had more control to design programming that produced high quality results through the implementation of Quality Rating and Improvement systems (QRIS). These systems incorporated the practices that theorists Dewey, Piaget, and Vygotsky introduced and tested. The early preschools such as Perry

provided strategies and curriculum that guided the formation of the state's QRIS. Because school accountability has become increasingly necessary, it was crucial that states began educating their youth more consistently and on a larger scale. Integrating high-quality preschool in public schools was a practical and universal path to achieve this goal.

The next chapter will describe the methods of the case study. Its purpose will be to provide an in depth understanding of how a school acquires Paths to Quality ratings of either Level 3 or Level 4.

CHAPTER THREE: RESEARCH METHODS

Early childhood education is not exempt from the growing accountability measures for high-quality programming and more rigorous standards in education. As more states seek a high-quality preschool option, more information is needed in order to successfully implement these programs. Indiana is one of the few states that has just begun to utilize these systems to integrate high-quality preschool in public schools.

In this chapter, the methods in which public school staff used to implement Paths to Quality Level 3 or Level 4 preschool were described. Paths to Quality (PTQ) is the Quality Rating and Improvement System (QRIS) Indiana selected to enhance the level of preschool offered in the state. Recently, public schools have been afforded the opportunity to achieve a PTQ rating. The goal of PTQ is to provide parents and guardians assistance in the identification and selection process of high-quality childcare (Elicker, Ruprecht, Langill, Lewsader, & Anderson, 2013). In order for a public school to receive state funding for preschool, they must go through the PTQ rating process. This study provides educators first-hand information on what the process entails and the costs and benefits of adopting it.

Purpose Statement

The purpose of the case study was to outline the implementation process of a public school to achieve a Level 3 or 4 PTQ rating. The study illustrates the process, school personnel experience, and a PTQ coach's perceptions of how to achieve a Level 3 or 4 PTQ classroom.

Research Question

The research question is as follows:

1. How and why do schools seek PTQ? What requirements and challenges do public schools encounter as they work through the process and procedures needed to achieve Paths to Quality Level 3 or 4?

1a. What action steps are needed for of each phase of PTQ implementation?

1b. What are the administrators', teachers', and coach's perceptions of the PTQ process?

1c. How do stakeholder roles differ throughout the PTQ process?

Research Design

The design of this research project was a case study. Schramm notes that the essence of a case study is to illuminate a decision or set of decisions. Case study research investigates why decisions were made, how they were implemented, and what the results were (Schramm, 1971). In addition, *how* and *why* questions are asked about a contemporary issue (Yin, 2014).

Due to limited research on PTQ implementation, I conducted a multiple case study of public preschools in Indiana: Filmore Elementary School and Clinton Elementary School[5]. The case studies will provide insight into the process Flimore and Clinton used to achieve PTQ Level 3. This design will illustrate revelatory cases that have not previously been accessible but are significant due to the descriptive information they provide (Yin, 2014).

The case study used data collected from staff interviews (see Appendix A). Also, a document analysis of written curriculum, lesson plans, policies, surveys and strategic planning was conducted by examining documents and artifacts and how they align to the Paths to Quality Level 3 requirements and procedures, (see Appendix B for analysis plan).

[5] Filmore Elementary School and Clinton Elementary School are pseudonyms and will be used consistently throughout the dissertation.

Description of the Sites

Filmore Elementary School and Clinton Elementary School were selected for the case study. The identified participants for the research include: school principals, preschool teachers, and a PTQ coach.

The preschools are located in Werner County[6] and Marker County[7] which are in eastern Indiana. Clinton Preschool is located in the northeastern quadrant of Werner County. The district has approximately 1,300 students. Three schools make up the district: an elementary (PK-5), a middle school (6-8), and a high school (9-12). The preschool is housed in the elementary building. Grades in the elementary range from pre-school through grade five. The preschool program has one full-day program for four year olds. The classroom has one teacher and two instructional aides. The other classroom is a half-day program. Three year olds attend in the morning, four year olds attend in the afternoon. There is one teacher and one instructional aide in that classroom.

Filmore Elementary is located in Marker County. The district has approximately 1,135 students. Three schools make up the district: two elementary schools and one junior/senior high school (7-12). The preschool is located in an elementary building. Grades in the elementary range from pre-school through grade six. The preschool program has one-full day program for four year olds. The classroom has one teacher and two aides. The other classroom is a half-day program. Three year olds attend in the morning; four year olds in the afternoon. There is one teacher and two instructional aides in that classroom.

[6] Warner County is pseudonym and will be used consistently throughout the dissertation.
[7] Marker County is a pseudonym and will be used consistently throughout the dissertation.

The demographic data for Filmore Elementary and Clinton Elementary as reported to the Indiana Department of Education appear in Table 3.1. The table shows student characteristics including ethnicity, enrollment, and socioeconomic status.

Table 3.1 Characteristics of Preschools Schools

Demographic data	Clinton Elementary	Filmore Elementary
% Caucasian	92.4%	90.4%
%African American	1.8%	0.8%
% Hispanic	0.8%	4.6%
% Multiracial	4.7%	2.9%
Student Enrollment	617	239
Preschool count	34	33
Socioeconomic Status (free lunch status)	35%	47.7%
Socioeconomic Status (reduced lunch) status	9.6%	5.5%

Note. All data are from the Indiana Department of Education. Data for the 2018-2019 SY (IDOE, 2019a)

The U.S. Census Bureau provides valuable data regarding community demographics. Table 5 highlights data for Werner County and Marker County. The data demonstrates the need for quality preschool programs based on the number of families living in poverty, many of whom do not have access to reliable transportation. Also, parental education levels tend to trend lower in high-poverty areas. Social indicators and challenges may include conditions in which people are born, grow, work, live, and age. The data for Werner and Marker counties is illustrated in Table 3.2. and Table 3.3.

Table 3.2 Social Indicators

Werner County	Percent	State Average	US Average
Poverty	18.2%	14.6%	14.6%
Median Income	$41,813	$52,182	$57,652
High school	85.5%	88.3%	87.3%

diploma or higher			

State Single Year of Poverty, Vehicle, Median Income, and Education (U.S. Census Bureau, 2016)

Table 3.3 Social Challenges

Marker County	Percent	State Average	US Average
Poverty	17.4%	14.6%	14.6%
Median Income	$45,432	$52.182	$57,652
High school diploma or higher	87.7%	88.3%	87.3%

State Single Year of Poverty, Vehicle, Median Income, and Education (U.S. Census Bureau, 2016)

The census data in Tables 3.2 and 3.2 illustrate the need for high-quality preschool programming in Clinton Elementary and Filmore Elementary due to demographics: the districts are located in Indiana counties that have higher than state and US averages in poverty, lower in income level, and comparable in education. The data illustrates the need for a high-quality preschool because typically, low income and rural students lack accessibility to such programming (U.S. Census Bureau). In these cases, high-quality preschool can be particularly beneficial (Dalziel, Halliday, & Segal, 2015). According to the Indiana Early Learning Advisory Committee (wwwd.elac.indiana.org) a total of 8,922 young children need care. Approximately 3,105 in Warner County and 5,817 in Marker County have been identified as children in need.

In terms of school-based programs, there are only 15 in Warner County. Of those fifteen, only one is PTQ. In Marker County, there are 17 school-based programs. Of those seventeen, only 2 are PTQ. According to ELAC Indiana, Early learning can be linked to later success.

Instrumentation

One primary instrument was used for data collection and analysis: the researcher (Merriam, 2009). The researcher's role in qualitative analysis is often personal to the study. In

some cases, the study participants may know the researcher and their biases; or the researcher may know the participants and their biases. In addition to the researcher, three other data collection instruments were used in the case study: first, a semi-scripted interview protocol was used for teachers, administrators, and a Paths to Quality coach. Second, a textual analysis of program evaluation documents was conducted to highlight PTQ Level 3 policies of a preschool classroom including: early learning standards, teacher degree requirements, teacher specialized training, assistant teacher credentials, teacher in-service, preschool policy, and handbooks. Third, Paths to Quality site evaluations were studied for schools.

Interviewing school staff allowed the study to acquire accurate responses and document both verbal and non-verbal information. The purpose of the interviews was to gain an understanding behind the scenes of the PTQ process and what each role entails. The semi-scripted interview protocol was created to answer the research questions. Questions focused on how each level of PTQ was met, how much effort was required, what steps in the process were difficult, which ones were easy, and how long the process took overall. The interviews were conducted as one-on-one meetings at Clinton Elementary and Filmore Elementary and lasted approximately forty-five minutes to an hour. The interviewees included the principal, assistant principal, preschool teachers, and PTQ coach. These participants were selected due to their intimate involvement in the PTQ process. Question types varied. For example, the teachers were asked more instructional questions, while the administrator was asked more programming questions. Site evaluations were used to provide readers with in-depth knowledge of how the programs were evaluated during the process, as well as after the program had been established.

PTQ protocols required several pieces of documentation. These documents included: daily schedules, parent communication artifacts, parent handbooks, lesson plans, health and

safety policies, membership documentation, and program evaluations. The documents were evaluated for PTQ indicators. For example, did the lesson plans include Indiana Early Learning Foundations? Was a parent survey conducted annually as required by PTQ? And, what type of curriculum was used?

Data Collection

Data for the case study was generated from three sources: interviews, collection of documentary evidence, and observations. Interviews were conducted at the school. Personnel included building level administrators, preschool teachers, and a PTQ coach. Interview data provided preschool programming information that will be analyzed for Level 3 requirements.

For documentary evidence, the school was asked to provide the curriculum plans, examples of parent communication, preschool handbooks, strategic plan, program evaluations, polices, daily schedules, and student samples of activities. The evidence provided information to illustrate how the school's preschool operates in terms of policies and procedures. Site evaluation data was shared for schools to discern how the implementation steps align with required initial evaluations and also continued evaluations as the school carried out Paths to Quality programming.

Data Analysis

Grounded Theory authors Glaser and Strauss (1967) developed social science research strategies of coding and memoeing for a comparative analysis. Open coding was used to break down, examine, compare, and categorize the interview data that was collected. First, the preschool teachers, nurse, PTQ coach, and administrator interviews were transcribed verbatim. Next, themes and concepts were collated to create a coding matrix (see Appendix D). Code

words were selected from the transcriptions, the code words were grouped together based on common themes. The codes were then categorized and compared to one another. Thirteen themes were identified. This process allowed for reliability among the responses.

Open coding was used to review interview responses and document analysis. Open coding enables examination, dissection, categorization, and dismantling of the data into separate parts. Separating the data sets into parts allows for reorganization of the data in different ways and by using the constant-comparison approach, themes and patterns can be identified. The Memoeing process generated notes to be made during the coding process by looking for main ideas and patterns. Identifying themes and patterns enabled the formation of categories. The categories revealed similarities and differences between themes.

Rubrics were used to assess documents and policies (see Appendix B). A collection of documents was examined that include preschool polices, school handbooks, corporation policy, preschool standards, schedules, and curriculum materials. The documents were compared to PTQ requirements. Also, practice versus policy was compared based upon interview data collected from each interviewee, school documents, and site evaluations.

Limitations

There were several limitations that impacted the case study. First, state-funded preschool was a relatively new concept in the State of Indiana. The pilot program began in 2015 (NIEER), and only five counties were initially selected to participate. In order to receive state funding, a preschool must acquire a Level three or four on the Quality Rating and Improvement System (QRIS), Paths to Quality (PTQ).

Second, public schools' achievement of the necessary PTQ rating of Level 3 or higher was low. In 2013, there were 1925 public schools in Indiana, only 81 of which were labeled PTQ

Level 3 or higher. In order for schools to achieve this distinction, they need to know what it is, know what steps and actions are required, and have the necessary resources to successfully complete the process.

Third, there was little information available regarding the costs and benefits of PTQ preschool. It is difficult to measure the impact of this program since it has only been in place for a few years.

Finally, evaluation of QRIS and PTQ in general were still in the formative stages. This lack of data hinders educators in choosing programs when impact cannot be measured nor fully understood (Elicker, Ruprecht, Langill, Lewsader, Anderson, & Brizzi, 2013).

Summary

The purpose of my dissertation was to discover how Indiana preschools successfully complete the PTQ process. The purpose of this chapter was to describe the methods used in this case study. Two preschools were studied to understand how preschool programming for PTQ was implemented. School staff were interviewed. A document analysis of curriculum and program standards were conducted to identify processes and procedures. Site evaluations were compared.

Chapter 4 will present the results of the case study. Descriptions of the school and classrooms, staff interviews, and data collection results will all be reported.

CHAPTER FOUR: FINDINGS

The analysis of two rural Indiana schools illustrates the implementation process to achieve Paths to Quality Level 3 or Level 4. The steps to acquire this distinction involve many stakeholders, achievement of numerous standards, and specific staff credentialing and training. This study provides insights into what school faculty encountered as they implemented PTQ preschool and allows other school leaders and teachers to better understand the process in order to make an informed decision as to whether or not they should seek PTQ.

Purpose Statement

The purpose of the case study was to outline the implementation process of a public school to achieve a Level 3 or 4 PTQ rating. The study illustrates the process, school personnel experience, and a PTQ coach's perceptions of how to achieve a Level 3 or 4 PTQ classroom. The research revolves around the following research questions:

1. How and why do schools seek PTQ? What requirements and challenges do public schools encounter as they work through the process and procedures needed to achieve Paths to Quality Level 3 or Level 4?
    a. What actions are needed for each phase of PTQ implementation?
    b. What are the administrators', teachers', and coaches' perceptions of the PTQ process?
    c. How do stakeholder roles differ throughout the PTQ process?

The contents of the chapter include participant demographics as well as findings that emerged through themes, sequential data of level acquisition, perceptions shared by the participants, and documents that relate to each research question.

Participant Demographic Data

Table 4.1 provides demographics of the participants. During the interview process, I had conversations with seven participants. Three participants were from Filmore Elementary and three were from Clinton Elementary. The seventh participant, Greg, was a Paths to Quality (PTQ) coach who was based out of a childcare resource and referral company and provided on-site guidance to schools seeking Paths to Quality. Each participant shared their previous educational experience prior to their current positions, which is captured below.

Table 4.1 Participant Demographics

Participant	Title	School	Gender	Degree	License Type/ Certification	Years of experience
Ms. Carol	Principal	Filmore	F	B.S. Secondary Education M.A. Educational Leadership	English 7-12 Journalism 7-12 Speech 7-12 Building Level Administrator K-12	22
Mr. Mike	Principal	Clinton	M	B.S. Elementary Education M.A. Educational Leadership	Kindergarten General Elementary 1-6 Build Level Administrator K-12	22
Ms. Marcia	Teacher	Filmore	F	B.S. Social Work Transition to Teaching in Elementary Ed	Mild Intervention P-12 Elementary Primary Generalist Intermediate Generalist	6
Ms. Jan	Teacher	Clinton	F	B.S. Early Childhood	none	2
Ms. Alice	Teacher	Clinton	F	B.S. Elementary Education	Kindergarten General Elementary 1-6	15
Ms. Cindy	Teacher	Filmore	F	A.S. Early Childhood	CDA	8

Coach Greg	PTQ Coach	M	B.S. in Early Childhood B.S. in Elementary Education	2

As shared below, descriptions of the participants' experience and education provided not only information on their professional background, but also how their qualifications and experience fit PTQ requirements. At the end of this section, participant demographics are compared for similarities and differences.

Principal Demographics

Filmore Elementary School principal, Ms. Carol, was a secondary English teacher at both a middle school and high school. Her first administrative job was principal at a residential treatment facility. After that, she became an associate high school principal and then a middle school principal. She earned her undergraduate degree from Western Kentucky University and a master's degree from Indiana University in Educational Leadership.

Clinton Elementary School principal, Mr. Mike, began his teaching career as a first-grade classroom teacher for two years. He was a 5th grade self-contained gifted and talented teacher in the state of Illinois for one year. He then became a 3rd grade self-contained gifted education teacher in Illinois for two years. Next, he was a 4th grade, 5th grade, and multi-age teacher in Lafayette, Indiana for six years. His last year in the classroom was as a remediation teacher in Lafayette, Indiana; and then he moved to Clinton School to become an assistant principal for five years. He has been the principal at Clinton School for the past seven years. He attended Ball State University for his undergraduate and graduate degrees.

Teacher Demographics

Filmore School had two preschool teachers. Ms. Marcia was in her fifth year as a developmental preschool teacher. Prior to that, she worked for two years at a traditional preschool. She obtained a bachelor's degree in social work and then completed the transition-to-teaching program at Anderson University for her teaching license. Once she was offered a special needs preschool teaching position, she returned to school and got her special education degree. She has a special education kindergarten through grade 12 and a preschool teaching license. Ms. Cindy has eight years of experience teaching preschool. She taught for three years in a childcare center before moving to an elementary school where she has been for the past five years. She has an early childhood associate's degree from Ivy Tech Community College. She also has her CDA, a Child Development Associate credential.

Clinton School also had two preschool teachers. Ms. Jan started in an after-school program and served in that role for three years. She attended Indiana University East and obtained a bachelor's degree in early childhood education. She then moved into a preschool aid position. She was in the preschool aid position for four years. A position opened in the preschool to be the lead teacher. She also obtained a minor in reading. Ms. Jan planned to obtain an elementary teaching license after returning to school. Ms. Alice was in her 15th year at Clinton. She has a bachelor's degree in elementary education, including kindergarten level. Ms. Alice taught preschool for four years prior to her current assignment and also has a few years of teaching homeschool preschool. She also taught preschool in Zimbabwe, Africa.

Coach Demographics

The PTQ Coach, Greg, had two bachelor's degrees: one was in early childhood and the other was in elementary education. At the time of data collection, he was one semester away

from obtaining his master's degree in elementary education. Greg began his educational career through an administrative practicum at a childcare referral company that provides support services to schools seeking PTQ. Upon completion of the practicum, he was hired full time at the company. He worked half time in the referral side of the company, and the other part of his day he worked with children in the center with three-year-olds and at-risk youth of kindergarten age. After four years in that position, he became a full time PTQ coach.

When comparing and contrasting participant data, several things stood out. Similarities that emerged included that both principals had 22 years of education experience and master's degrees. Another shared characteristic was that all of the teachers were female, but the male participants were either a coach or a principal.

There were also noteworthy participant contrasts. The principals had different teaching backgrounds: Ms. Carol had secondary teaching experience and Mr. Mike had elementary teaching experience. Also, Ms. Carol had been a high school, middle school, and elementary principal. Mr. Mike had only elementary administrative experience. Years of experience by teacher varied from two years to fifteen years. Importantly, not all of the teachers had a teaching license. Ms. Marcia had special education and preschool teaching licenses, while Ms. Alice had an elementary and kindergarten teaching license. Ms. Jan and Ms. Cindy did not have licenses. Jan had an early childhood degree and Cindy had a CDA. Coach Greg shared that in the majority of schools he had coached, the teachers had either degrees or CDA's. Teachers can also have teacher's licenses to meet the standard.

Another peculiarity was that one teacher had both a bachelor's and master's degree; two had bachelor's degrees, while one had an associate's degree. Unique characteristics of the participants included one teacher having a social worker degree and one teacher with teaching

abroad experience. The schools also had characteristics that contrasted and aligned with one another.

Similarities and Differences of Participant Schools

Table 4.2 outlines programming components that each school has to have as part of the PTQ process. Program history shows a difference in the number of years the schools have been PTQ. Clinton School began PTQ as part of an earlier funding initiative, which has now changed to OMW PreK. Filmore School became PTQ Level 3 just last year in hopes of utilizing the current state funded grant, OMW PreK. In terms of programming, the schools mirror one another in their type of classrooms. Each school has 2 classrooms, one full day for four year olds, the other half day for three and four year olds that may or may not have developmental needs. In contrast, Clinton School received OMW funds and CCDF vouchers, while Filmore School did not. Principal Carol shared that the process to acquire the funds is not easily achieved and they were not ready to reach that step at the time data was collected. A final component of the programming that varies is the amount of available resources. Both schools used the same coach, Mr. Greg, who was reported by participants as a positive asset to the process. The resources vary when comparing schools, due to Clinton School not being an OMW county versus Filmore School being an OMW county. OMW counties have a network of schools and personnel that meet regularly and have local contacts for support. For Filmore, there are more opportunities to network with neighboring schools naturally during district meetings, while Clinton School is isolated by being the only PTQ school within their county and not geographically close to an OMW county.

Table 4.2 Programming Comparisons

Programming Components	Filmore School	Clinton School

Preschool History	1st year PTQ	3rd year PTQ
Preschool programming make-up	2 classrooms, four-year old full day, developmental half day with 3 year olds and four year olds	2 classrooms, four-year old full day, developmental half day with 3 year olds and four year olds
Network of Resources	Because Filmore is in an OMW PreK county, there are several schools close by going through the process or were already PTQ Level 3 or 4, the school had frequent meetings with these folks and could lean on them for support or questions.	Clinton is not part of an OMW PreK county. It is the only school in its county that had PTQ Level 3 or 4. Networking and working with other preschools was more difficult.
Funding Component that aligns with PTQ preschools	Does not accept OMW PreK students at this time.	Accepts OMW PreK students
Funding Component that aligns with PTQ preschools	Does not accept CCDF voucher students at this time	Accepts CCDF Voucher students

Findings

Data collected from conducting interviews and performing the document analysis is provided in this section. The findings emerged through coding and memoeing. The themes are broken down in the following sections and paragraphs. First, an explanation of the rationales for seeking PTQ were compiled. Next, each level is dissected to better understand the actions required. Perceptions, both positive and negative, that emerged are shared at the end of this section.

Rationales for Seeking PTQ

The participants reported varied reasons why their schools sought PTQ. An important rationale was tangible incentives for implementing this programming, specifically grant

opportunities. Principal Mike sought Paths to Quality because the school wanted to offer preschool programing for their families. The Early Education Matching Grant (EEMG) was a grant the state offered schools. Fifty percent of the funding came from the grant, and the other fifty percent came from local sources. The school applied for this competitive grant and received it. Once the process began, Clinton School staff were obligated to acquire Paths to Quality Level 3. Due to the emphasis put into acquiring the competitive grant, not much attention was paid to what would happen if and when the school received the grant. Clinton School had a developmental preschool prior to seeking PTQ. Once the PTQ classroom opened and achieved PTQ Level 3, the developmental classroom achieved PTQ Level 3 in a subsequent year. Clinton School was not in an On My Way PreK county, yet it received funding due to a previous EEMG grant. Principal Mike stated, *"*We were unique in that they [state] awarded us a grant for a program that did not exist." Clinton Schools was awarded the EEMG grant, but had not yet implemented PTQ. A stipulation of the grant was to complete the implementation upon grant approval.

Providing high quality early childhood programming to more students in their community was the reason behind Filmore School seeking PTQ Level 3. Principal Carol's rationale was: "We wanted to provide more early childhood education for this area. It's very limited on where students can go, but we needed to do a Level 3 to be eligible for grants and also be eligible for On My Way Pre-K dollars."

A third reason schools sought PTQ, is the On My Way PreK program. This program is based on the legislation House Enrolled Act (HEA) 1004-2017 (http://iga.in.gov/legislative/2017/bills/house/1004). The purpose of this program was to provide high-quality pre-kindergarten programming. The school district became eligible to receive

funding in January 2018. Even though Filmore School was a PTQ Level 3 program, it did not receive On My Way PreK dollars at the time of this writing. School 1 had two preschool classrooms when the process to obtain PTQ began. The classrooms were set up as Title 1 preschools that served four year olds in an all-day setting four days a week. The second classroom was a developmental special education classroom that served three and four years olds in a half-day program. Because both of these programs received some type of federal funds, the school was not ready to take the additional step of getting grant funds at the time of the interviews. Principal Carol shared:

> We wanted to do Paths to Quality because we were in a county that is labeled as one of the 'high addiction opioid' counties. We wanted to provide more early childhood education for this area. It's very limited on where students can go, but we needed to do a Level 3 to be eligible for grants and also be eligible for On My Way Pre-K dollars. We also wanted to be eligible for grants to be able to expand. Ideally, we'd like four classes.

Another reason schools sought PTQ is that they wanted to be competitive with other early childhood agencies. Coach Greg stated:

> At the end of the day it's a business. Ultimately you have to be competitive, if it's the school does not have a good program they are not going to take their kids to school… If your program is a quality program then they will stay there. If a parent has a 3rd grader and a child in preschool and want them to go to one location then schools have an advantage there... I definitely think that the way our current education system is going it seems like more schools are going to be opening up to preschool and really trying to

take that part. I would not be surprised in a decade or two if preschools will in all the schools and that just becomes a thing.

A final rationale for implementing PTQ Level 3 or 4 is provider incentives. Based on participant testimonials and document analysis from the Office of Family and Social Services, achieving Paths to Quality Level 3 enabled schools to be eligible for benefits. Those benefits included financial, in-kind resources, and support. Four types of awards were identified. First, by successfully completing Level 3, schools received a one-time $1000 non-cash award, which meant schools could purchase up to $1000 of materials from a vendor provided by PTQ. In some cases, schools were just given money instead that could be used to purchase materials and equipment. Second, free marketing materials such as a toolkit, recognition certificates, and decals were awarded for each level achieved plus a PTQ sign or banner. Next, scholarships and professional development opportunities for staff were available. Finally, schools were eligible to receive increased maximum reimbursement through a CCDF voucher program.

When reviewing the responses for seeking PTQ, schools both overlapped and diverged in their reasons for seeking PTQ. The schools were both located in rural areas that have a high need for quality programming. By achieving Level 3, both schools received $1000. These funds could be used for programming purchases like supplies or curricular materials.

There were several areas in which the schools diverged. Filmore School was part of an On My Way Prek County, Clinton School was not an On My Way Prek county but did receive these grants through a different funding path. Clinton School started their initial preschool program based on PTQ standards. Filmore School, on the other hand, had existing preschool programs but then transitioned to PTQ classrooms.

Required Actions for of Each Phase of PTQ Implementation

There is a sequence of standards acquisition related to implementation of PTQ Level 3 or 4. The implementation process required schools to each achieve level in a sequential order. Each level contained a series of standards that related to a specific area of preschool. Level 1 was safety, Level 2 was environment, Level 3 was curriculum and Level 4 was national accreditation. Each phase of the implementation is described in Appendix C. The following paragraphs explain the actions needed to complete each implementation level. The participants' experiences and perceptions of each level are shared in subsequent sections.

Repeated actions for schools occurred at all levels. As schools moved past each level, the training and staffing requirements increased. At each level, all staff, including directors, had to complete a certain number of hours of professional development annually. Staff credentialing increased as schools progressed through the levels. The higher the level, the more education the staff needed. Staff members were required to provide licenses, certificates, or transcripts as evidence.

Level 1 focused on health and safety standards. Achieving a form of licensing was the first step schools had to achieve. PTQ has four different options for providers. Schools were given a choice of licensing paths. The first option was to become a licensed child care center which could be applicable to a school if they planned to provide care and programming to infants and toddlers. The other option for schools was to become a Limited Licensing Exempt Provider (LLEP). This process constituted the majority of the implementation process. Two other standards were required of schools: one was Indiana School regulations which were already met because both schools were public schools. The final standard was an Indiana Code requirement regarding teacher/staff ratios, which schools had to meet.

School participants described Level 1 as “cumbersome”. The LLEP process had 38 standards that schools had to meet or provide evidence of. In both schools, the director or principal held most of the responsibility. Actions included completing applications, forms, and compiling personnel evidence for raters to review. All staff including the director obtained FBI background checks and were screened for TB and drugs. At Level 1, staff had to pass annual CPR and first aid training. Teachers reported having to provide forms for Level 1 if they pertained to classroom health and safety. The PTQ coach was not directly involved in Level 1 because it was supervised by a department other than PTQ.

Actions for Level 2 focused on environments. Level 2 had eleven standards that had to be met. The preschool teachers attained the majority of standards for this level because it was focused on setting up centers, establishing a daily schedule, and creating a system of parent communication. The teacher participants reported either setting up centers or adjusting them to meet required standards. Coach Greg worked with teachers to ensure the centers met all the required indicators. The daily schedule requirements included several transitions. The teachers reported how they incorporated those into the schedule, describing them as relaxed and often accomplished using songs as the students cleaned up a center or moved into a large group activity. Coach Greg reported that he worked with all the schools to ensure the transitions were natural and deemed acceptable by the raters during site visits.

Actions for Level 3 centered around curriculum. Level 2 enabled teachers to set up a preschool classroom environment that was welcoming, nurturing, and safe for students. Next, the curriculum needed to be aligned to address the different stages of child development. Again, teachers were the main participants in Level 3. There were ten standards that had to be achieved. Teachers reported having to work on strategic plans. The teachers had to ensure that the daily

schedule included a third of their day as free-play time. PTQ expected preschools to be play-based to allow for engagement and discovery learning. Participants also reported having to provide raters with accommodations for students with special needs. Upon achievement of Level 3, schools had access to OMW PreK funds for eligible students. Schools were also recognized as PTQ preschools. Sites were given a sign to display, and both schools in the study achieved this level.

Actions for Level 4 focused on meeting the most rigorous standards for a high-quality early childhood program. Public schools that sought this level had to complete two tasks. The first standard required schools to receive and maintain national accreditation from an early childhood education association. Neither participant school had yet to achieve this level. Coach Greg explained that of the twenty schools he had coached, none had sought that level. There were four accreditation models a school could attain. The second task schools had to achieve in Level 4 was to mentor another school that was seeking PTQ Level 1, 2, or 3. This requirement was described as informal.

Actions needed to attain each level were prescriptive in design. Each level had standards to meet; each level had a checklist that raters used to assess each school's attainment. The checklists provided schools with a guide that described the evidence that needed to be collected and what raters should see when they visited the classroom.

In sum, the actions to achieve PTQ Level 3 or 4 required schools to complete a sequential set of standards for each level. Each level had a different focus: safety, environment, curriculum, and national accreditation. The quantity of requirements varied per level. The roles varied as schools moved through the levels. Perceptions emerged from the participants that were both

positive and negative depending on the standard or level. These topics will be expanded and explored in the next sections.

Participant Perceptions of the PTQ Process

Participant perceptions regarding PTQ implementation varied based on participants and actions. The following sections outlined positive and negative aspects of the process.

Positive Aspects of the Implementation Process

Participant interviews revealed many positive perceptions about the Paths to Quality process. Filmore School achieved PTQ Level 3 in five months. The teachers and principal all concurred that this accomplishment "felt good." Principal Carol recalled that she was told achieving Level 3 could not happen in such a short time frame. Carol's school sought PTQ during the second semester. The school started researching PTQ in January and made it through all the steps in 3 months. Coach Greg reported that schools often ask, "how long will this process take?" He stated that he wanted each school to set a goal and work with them individually to meet their goals. Coach Greg reported that Filmore school did a "fast track" implementation to have the program completed before the school year concluded.

PTQ Coach

All school participants had positive comments regarding the PTQ coach's role in the process. Even though the PTQ coach is not directly involved in Level 1, he still provided support and guidance. As evidenced in Level 3 data, Coach Greg prepared schools for what raters would look for. Interviewees reported that he was a great asset during the process. Participants reported that Coach Greg not only navigated them through the process, but also provided them tips on implementing innovative strategies in the classroom. Ms. Marcia shared her experience with Coach Greg:

> He [PTQ coach] was very helpful with that, we had a goal and he knew we wanted to meet it and he did help us with everything we needed. We could text him and he was always good about getting back to us and he still is and he has answered any questions and if he did not know the answer, he would go get it and find it.

Clinton School was the only school in its county to achieve PTQ Level 3. This distinction provides the school a positive marketing asset when recruiting families. Clinton School was in a county with 5 school districts and 13 elementary schools. This distinction set them apart as the only public school that is recognized as having a high-quality preschool.

Daily Schedule

All teachers shared their implementation of a daily schedule as a positive aspect of the process. Each teacher posted a daily schedule, which included a third of the day being free play. Each schedule I reviewed had components of large and small group time as well as center time for individual activities and free play.

Program Quality

Program Quality was another positive perception of the process. PTQ standards expected best practices in all aspects of the classroom as outlined in the various levels. Principal Mike explained PTQ created a classroom environment that used best practices. The many curricular components of this level created a learning environment that was highly engaging. Evaluating teachers in the preschool classrooms was a positive exercise for him because they were constantly meeting all standards within their classroom and goals. Another feature of program quality was the play-based model. Ms. Jan liked seeing the students learn as they interact in centers and learned tasks and skills naturally. Ms. Marcia liked the programming because

preschoolers do not learn like kindergarten or first graders. Going from a developmental room to a PTQ classroom, she learned best practices from the trainings she attended. She shared an example:

> Seeing them [the students] when that light bulb clicks on and they can write their name, all because you sat down with M&M's and did it that way. It is just amazing what they do and just what you can see from stepping back and observing them.

Ms. Marcia and Principal Cindy shared the mind shift that occurred during the PTQ implementation process. Prior to that, they felt preschool should be getting the students prepared for kindergarten and beyond, which it does. But also, they learned the importance of play-based and exploratory learning.

Negative Aspects of the Implementation Process

Schools often sought PTQ because of the prospect of receiving funding. The grant program was called On My Way Prek. Deciphering OMW PreK components and PTQ requirements often became challenging. OMW PreK was the grant program that allowed schools to receive state funds for children who qualify. In order to receive state funds, schools had to first meet the PTQ requirements. The process of PTQ with four levels to possibly meet could be daunting. For schools, the added piece of funding made it more complicated. Filmore School decided to take on the PTQ process first and once that was completed, they would work with the funding component because when schools received the grant funds, more work was involved. Each family who qualified had to work with an outside agency to become qualified. Next, schools had to receive training on point-of-sale devices to track attendance in order to receive state funds or vouchers.

Staff Requirements

Teacher credentials had to be reviewed. In order to teach in a PTQ classroom, the teaching staff had to meet certain degree requirements. A large part of that was having taken early childhood courses. The raters required teachers and staff to share a copy of their educational transcripts. Participants revealed that the requirement felt redundant, because they had already been hired by the school and cleared to work in preschools, yet Level 1 made them submit documentation to be reviewed all over again.

"Red Tape"

Level 1 (PES) Provider Eligibility Standards had numerous requirements that seemed redundant to participants. Meeting requirements for the initial level was very intensive. The eighty-page packet the schools received was overwhelming for some participants. They felt it was a lot of paperwork and exhaustive. In addition to teacher credentials being reviewed by the raters, each staff member had to have FBI background checks prior to employment. Unfortunately, those were not acceptable for Level 1. Also, each staff member had to take and pass a drug screen and a TB test. These additional requirements were above and beyond what a public school required and were an added cost which could be prohibitive for schools. Standards did not state who had to pay for them. The schools in the study covered the cost of the screenings and tests. Coach Greg shared that some schools work with local foundations to seek funding while others asked employees to pay for the screenings. Another factor with these requirements was frequent turnover. Preschool assistants were part-time employees who often changed jobs due to the low pay and fewer hours. Schools lost these employees on a regular basis, which meant adding more staff and funding, more screening and tests, often in the same school year. The same requirements had to be met by substitute teachers as well, which could be costly.

Rating Process

Raters for PES process and PTQ were very formal. The site visits were unannounced and feedback was not immediate. Raters visited the classroom, they did not interact with the teacher. Sometimes they met with the director, other times they did not. For Level 1 the raters were limited in when they visited schools because there were regions. Within each region there were only two raters. Filmore School was ready for the site visit in May. The rater's office explained that it would take up to four weeks to visit. The school was finishing up for the summer and in order for the raters to rate the program, students and staff had to be present. The raters were hired from a third-party vendor, so they did not work with PTQ coaches or the Office of Family and Child Services. The raters did not interact with the staff during the visit. Upon completion of the visit, they provided no feedback to the schools. The participants felt this was a negative aspect of the process because they worked so hard, and when site visits were conducted feedback was not given to them. Participants could not ask questions of the raters, but some felt intimidated.

Network of Resources

Lack of resources was a common concern for teachers. The coach was a great support while going through the process. But this was a new initiative, and counties or sites selected to participate were often demographically isolated. This prevented schools from reaching out to other programs because the counties were not typically contiguous and sites were based on school interest, not necessarily proximity to other PTQ public preschools. Filmore School was in a PTQ county, so the support system for them was more cohesive due to county-wide meetings that naturally allowed teachers to network and share experiences and ideas. For Clinton Schools, they were the only school in their county, so proximate networking was limited. The only

meeting that was required for PTQ schools was one to go over funding. They met only once a year and discussed changes in the application process.

Director Requirements

In order to be categorized as the preschool director, the principal or teacher had to document hours or experience with early childhood education or training. One of the principals could not be the director because she did not possess enough early childhood hours or experiences, even though she had been a school administrator for several years. By having this requirement, Filmore School had to name Ms. Marcia the director, yet they could not pay her more for her additional duties. The principal was often out of the loop because raters would not share information about site visits with the principal because she was not the director.

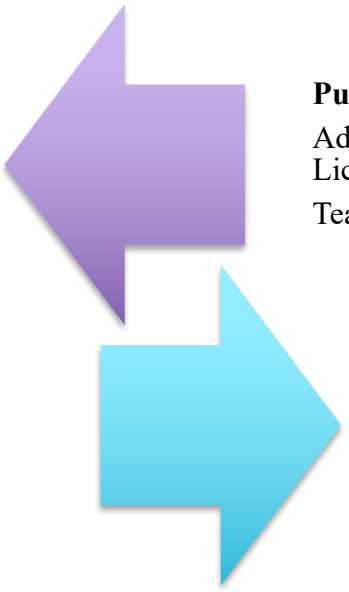
Training

Training hours were required for teachers and staff at every level. In order to achieve PTQ Level 3, at least 50% of the teaching staff had to complete 20 hours of training on early childhood topics annually. In addition to this requirement, if the teacher had an Indiana teaching license, they had to do additional training to keep that license current. This is an example of another redundancy when PTQ overlapped with public school requirements. Many participants expressed a desire to see these requirements become more systemic as the process evolved to include more public schools. Ms. Jan felt it allowed her to become a better teacher and also validated the practices that were in place in her classroom when she attended trainings or conferences.

Requirements and Challenges of PTQ Implementation

Many differences were highlighted throughout the study that indicated how a PTQ Preschool differed from that of public schools in terms of policy, credentials, training, and

procedures, and philosophy. Principal Mike described PTQ Preschool as "a school within a school" The following figures demonstrate the differences of a PTQ school versus an Indiana Public School. The participants noted various topics as they described the process.



Public School requirements:

Administrator: Valid Indiana Administrator License

Teacher: Valid Indiana Teacher's License

PTQ Requirements:

Director: Must have coursework or training in early childhood

Teacher: Either a teaching license that include preschool or elementary, CDA, or an early childhood degree

Figure 4.1 Variance in Staff Credentials

Figure 4.1 illustrates how PTQ differs in its staffing requirements. In order to be a director, the individual has to have at least 15 hours in early childhood as part of his or her degree. To be principal in a public school one must hold an administrator license, which can span from kindergarten through grade 12. In some cases, principals may have a secondary background and not have taken any early childhood classes, which negates their ability to be the director of the preschool. At Filmore, Principal Carol could not be the director because of this requirement. In terms of teacher credentials, the PTQ requirements for teachers have many options, however in a public-school setting, one must possess an Indiana teacher license.

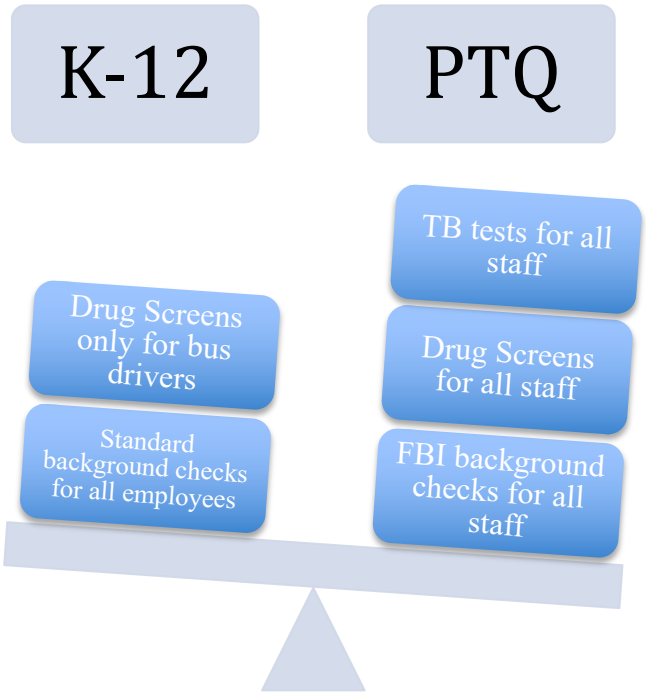


Figure 4.2 Screening Requirements

Figure 4.2 illustrates the differences between screenings that are required for employment. In order to be a public-school teacher, the individual passes a background check. Yet, to be a PTQ teacher or staff member, one has to pass an FBI background check, which includes fingerprinting, a drug screen, and tuberculosis test. The FBI tests are around $200 whereas the public school hiring background check costs approximately $31.

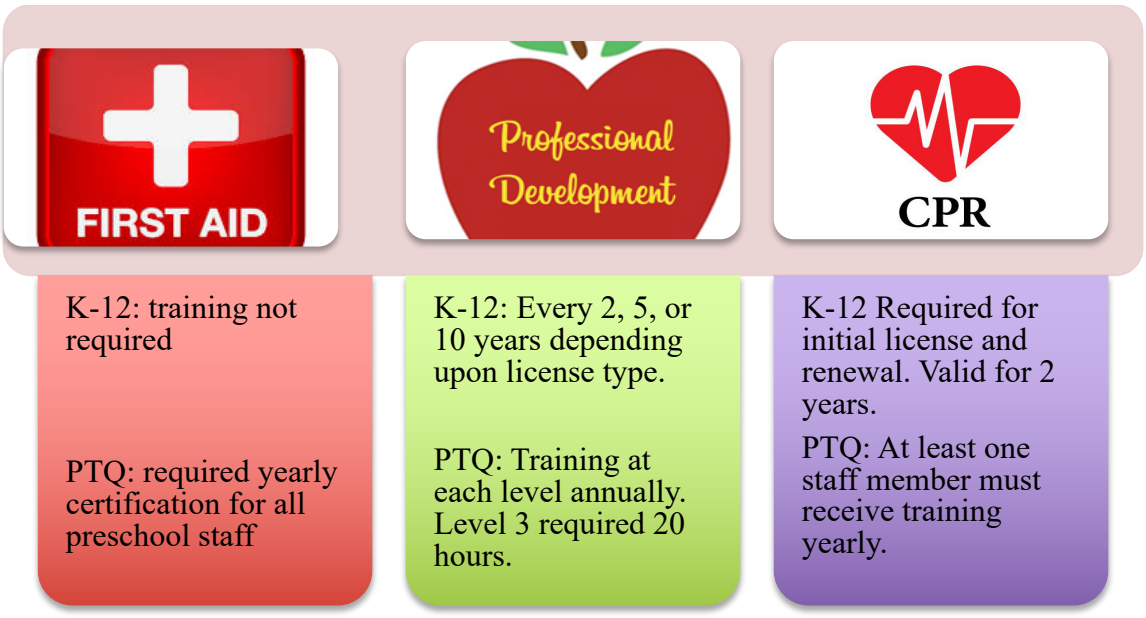


Figure 4.3 Training Requirements

Figure 4.3 outlines the differences in training requirements. Public schools mandate teacher training and CPR certification as it aligns with license renewal. PTQ renewals are conducted annually for all aspects of the program. This requirement includes teacher and staff training in areas of professional development, CPR, and first aid trainings.

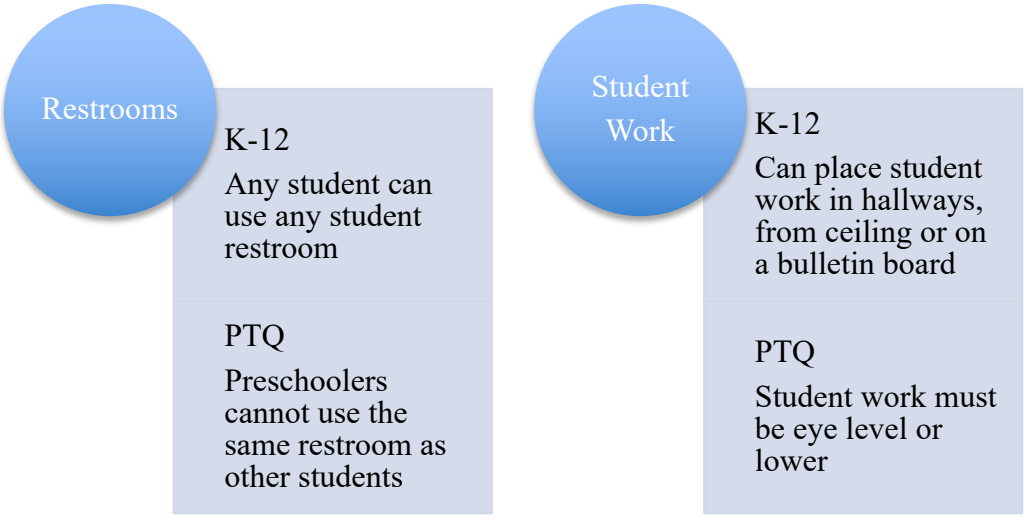


Figure 4.4 Environmental Requirements

Figure 4.4 illustrates environmental differences. Restrooms cannot be shared if a PTQ classroom is in a public school. If the preschool has a restroom in its classroom then it is not an issue. If there is no restroom in the classroom, then the classrooms near the preschool could not use the restrooms while the preschoolers are in there. Another environmental difference is artwork displays. In a public school, artwork hangs from the ceiling, in the hallway, or in all parts of the classroom. In a PTQ setting, all artwork has to be displayed at student eye level or lower.

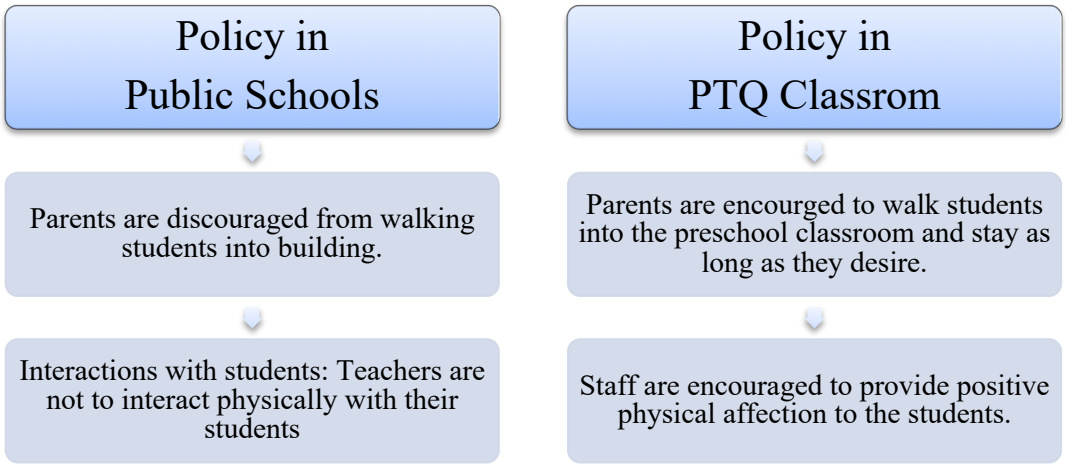


Figure 4.5 Policy Variation

Figure 4.5 features a few policies that diverge when comparing a public school and PTQ preschool. In a public school, students typically ride a school bus or are dropped off by a parent. The policy states parents are not to walk students into the building or go to the room without an appointment or prior arrangements. In a PTQ setting, parents are encouraged and welcome to come to the classroom anytime. Another policy difference is staff and student interaction. PTQ

classrooms include positive physical affection with the students, while in a public school that type of interaction is discouraged.

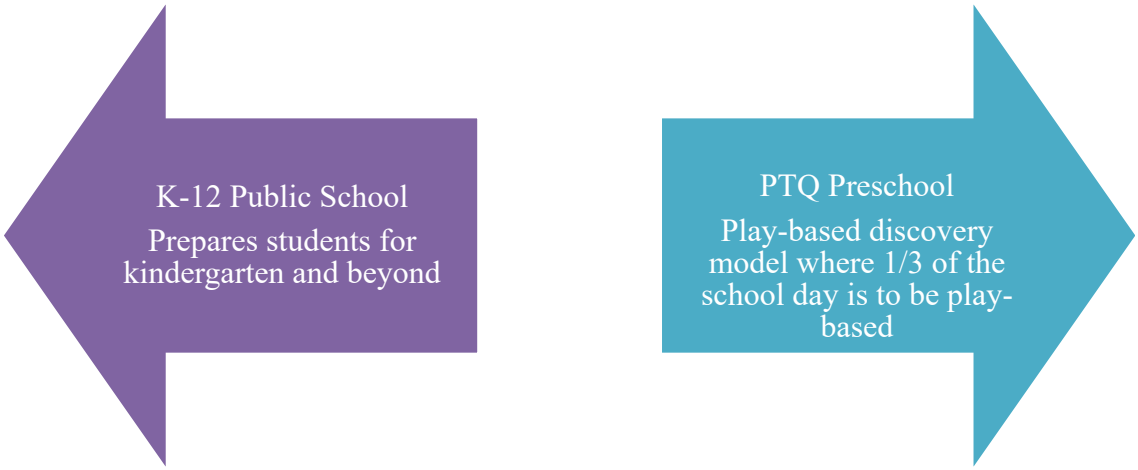


Figure 4.6 Philosophy

Figure 4.6 is a final example of varying views when comparing public schools and PTQ. This divergence is based on philosophy. The vision or mission of most public schools is to prepare their students for the next level such as middle school or high school. In a PTQ classroom the philosophy is based upon interactive learning that evolves through play. The goals do not include getting students ready for kindergarten.

Stakeholder Roles in the PTQ Process

As public schools considered whether or not to seek PTQ for their preschool model, knowing what stakeholders were involved and to what extent they assisted in the decision-making process was important. The participants shared their role description and for which requirements each participant was responsible. The roles in the PTQ process varied depending on position. In the school setting, key stakeholders with roles included the principal and the preschool teachers. External stakeholders who had roles included the PTQ coach and the raters,

which consisted of one rater for Level 1 and a different rater for Levels 2-4. Each participant described their role in the PTQ process. The following sections detailed the stakeholders and their roles.

The Preschool Director could have been the principal, a teacher, and in some schools, it was the director of special education. He or she completed all LLEP (Legally Licensed Exempt Provider) paperwork for Level 1, which included ensuring that all 37 eligibility standards were met. Also, the director completed and submitted the following items for raters to review:

- Application for certification
- Employee/volunteer information form
- Criminal history forms and results
- Tobacco and substance policy
- Evacuation plan
- Emergency staffing plans
- Student records worksheet
- Consent to release form
- W-9 tax information
- Student immunization records
- Forms that were reviewed upon site visits included: monthly fire drill logs, emergency contact info sheet, emergency contacts for students, orientation checklist for staff and volunteers, and student discipline policy

If seeking Level 4, the director had to mentor another program seeking PTQ. Directors, like teachers, had to complete training in Indiana Academic Standards for young children. FBI

Background check, drug test, and tuberculosis test had to be obtained and passed as well. Finally, they had to become a member of a nationally recognized early childhood organization.

Principal Mike was director of the preschool at Clinton School. He described the overall process in two phases when explaining his role. Phase 1 was meeting the Provider Eligibility Standards (PES) or Level 1. Phase two consisted of PTQ Levels 2-4. He explained the Level 1 process as being separate from the PTQ process in that a school cannot attain PTQ unless it was a licensed facility. Since public schools were not considered licensed daycares, the school had to become a limited license facility first, then proceed to PTQ levels. His role consisted of ensuring that the staff were trained, ensuring all required screening took place, completing all the forms, and gathering all the documentation needed. The director role was more administrative and compliance related.

The preschool teacher had to possess either a CDA certificate, early childhood or elementary education degree, or have at least 45 clock hours in educational training in early childhood toward the CDA or early childhood degree. Teachers were responsible for several standards in Level 2 implementation. These requirements included creating and implementing the following (See Appendix C):

- a system for communicating with parents (2 indicators)
- a classroom environment that is welcome, nurturing, and safe for students (13 indicators)
- daily schedules that provide ample time for student-directed choices and activities (9 indicators)
- outdoor play time (2 indicators)
- classroom arrangement (10 indicators)
- students are read to daily and encouraged to explore books (8 indicators)

Also, the teachers were responsible for several standards in Level 3 implementation. These standards included creating and implementing the following:

- A written curriculum that reflects philosophy and goals (1 indicator)
- Providing learning opportunities to support students' physical, cognitive, language, literacy, math, and creative development (11 indicators)
- Ensuring that students are actively engaged throughout the day in making choices about materials and activities (6 indictors)
- Plans and environmental accommodations for students with special needs (5 indicators)

Preschool teachers were required to complete training on Indiana Academic Standards for young children. They also obtained a FBI Background check, drug test, and TB test.

In yet another role, per state guidelines, PTQ Coaches (and any other CCR&R position) had to have a minimum of a bachelor's degree in early childhood education, child development, or a related field with a minimum number of credits in early childhood and/or child development. They also had to complete all the trainings and other requirements for child care program staff (health and safety training, child abuse training, Safe Sleep training, fingerprinting, drug test, TB test, CPI check.)

The PTQ Coach assisted schools with PTQ Levels 2, 3, 4 implementations. The coach also observed teachers and staff in their classrooms and coached them. The coach provided all materials and forms needed. He or she worked with the schools as they worked through the process. The coach could visit as often as the school needed them. When it was time for the annual re-evaluation the coach returned to help the school get ready. Coach Greg described his role as a "partnership" with the schools. He explained there are guidelines on what coaches are

supposed to do. Some coaches went in and looked at every standard and verified them. They spent a good amount of time in the classroom. Coach Greg felt like he could gain a snapshot without spending an hour or two in the classroom. The checklist schools received had interview questions for each standard, so he asked the teachers those questions to prepare them for what the rater would look for or ask about. The schools and coach gathered the necessary documentation to support the standards. Coach Greg assisted the schools and explained why certain documents were needed. He confirmed what all schools said: that he was a big part of their success because he provided support for all their questions and situations they encountered during the process.

The LLEP consultants and PTQ raters were from state agencies. At the time of the study, there were eight consultants for the State of Indiana. The raters visited schools and conducted inspections of environment, verified training, and checked all documentation submissions. The Legally Licensed Exempt Provider consultants were responsible for verification of compliance of the standards for Level 1. For Level 1, schools worked with a LLEP Consultant. The Limited Licensing Exempt Provider consultant visited public schools that were implementing the PES standards. Their focus was verifying that the school met the criteria. They verified staff documentation and site requirements. When obtaining Levels 2-4, the schools worked with a PTQ Consultant. The PTQ raters evaluated programming and interviewed staff. Their role was to perform an evaluation of the program based on each level a school was obtaining. For Level 2, PTQ raters were tasked with observing the classroom environment and curriculum implementation. For Level 3, raters interviewed the teachers on various aspects of the curriculum and daily schedule to ensure standard compliance.

Understanding the roles and how each one worked together provided schools insight into how the process may or may not work for them. Each of the roles described varies in responsibility. The three roles that are most involved in the process were the director, preschool teacher, and PTQ coach.

Summary

PTQ Level 3 and Level 4 implementation can be obtained by schools. Participants report the process was comprehensive and challenging. Diagram 4.7 summed up the key takeaways from the study.

Figure 4.7 Key Takeaways

Public schools are not required to seek Paths to Quality. Thus, in this study, information was sought to understand why schools would pursue PTQ. The primary reason schools pursued PTQ in this study was so they could receive funding. The participants initially sought the process to provide a need that families were missing in their communities. Also, the findings presented

key factors schools should consider prior to beginning the process. Those findings included costs, staff requirements, training, and incentives. Implementing PTQ requires financial commitments. Schools must conduct FBI background checks, drug screens, and TB tests for each employee or volunteer who interacts with a more than eight hour a month. Those costs were approximately $200 per person. Professional organization memberships, training fees, and curriculum were additional fees schools must incur. Training requirements were required for every level for all staff. As schools moved through the process, more training was required. Cash rewards and additional grant funds were incentives schools received for achieving PTQ. These takeaways provided positive outcomes and program improvement for the participating schools.

Understanding the PTQ process prior to beginning the implementation will allow schools to have a more positive experience. Many of the implementation requirements were not discovered until the participant schools began the process. For example, another key finding was the difference in PTQ design in comparison to public schools. Principal Mike summed up that a PTQ preschool is a school within a school because it had so many unique requirements when compared to the public-school system. Policy, training, staff credentials and environments requirements were the key differences of PTQ and public schools. Figure 4.8 below summarized each level and the key factors that schools should consider prior to implementation.

Figure 4.8 Summary of PTQ Levels

Figure 4.8 summarizes key components of each level. The diagram provides schools an overview of each level. Commonalities such as actions, costs, incentives, training, and evaluations are included. Findings, conclusions, limitations, and suggestions for future research will be presented in the next chapter.

CHAPTER FIVE: CONCLUSIONS

Chapter Five offers an abridged version of the study and its findings. Schools that achieve Level 3 or 4 through the PTQ process provide formal recognition of quality designation programming. In this study, school participants offered valuable insight into the PTQ process. This chapter provides schools yet to seek PTQ the opportunity to better understand the process through the study findings. This chapter concludes with suggestions for future research.

Overview of the Problem

Given that only a select few Indiana schools have been afforded the opportunity to participate in the state preschool pilot program, there is a lack of information for school districts about the PTQ process. Though initial results of the implementation of PTQ show success for the students who have participated thus far, more in-depth research is needed in order for schools to understand and successfully complete the requirements for PTQ.

Purpose Statement

The purpose of this case study was to outline the implementation process for a public school to achieve a Level 3 or 4 PTQ rating. The study illustrated the process, school personnel experience, and a PTQ coach's perceptions of how best to achieve a Level 3 or 4 PTQ classroom. The research was centered around the following research questions:

1. How and why do schools seek PTQ? What requirements and challenges do public schools encounter as they work through the process and procedures needed to achieve Paths to Quality Level 3 or Level 4?
    a. What actions are needed for each phase of PTQ implementation?
    b. What are the administrators', teachers', and coaches' perceptions of the PTQ process?

c. How do stakeholder roles differ through the PTQ process?

Review of the Methods

The design of this research project was a case study. Schramm states that the essence of a case study is to illuminate a decision or set of decisions. Case study research investigates why decisions are made, how they are implemented, and what the results are (Schramm, 1971). In addition, *how* and *why* questions are asked about a contemporary issue (Yin, 2014).

Due to limited research on PTQ implementation, the study focused on case studies of select public preschools in Indiana: Filmore Elementary School and Clinton Elementary School. The case study provided insight into the process these schools took to achieve PTQ Level 3. This design illustrated revelatory cases that have not been previously accessible but are significant due to the descriptive information they provide (Yin, 2014).

The case study collected data from staff interviews (see Appendix A). Also, a document analysis of written curriculum, lesson plans, polices, surveys and strategic planning was conducted by examining documents and artifacts to see how they aligned to the Paths to Quality Level 3 requirements and procedures (See Appendix B for document analysis plan).

Once interviews were conducted, transcripts were prepared to examine the content for themes and patterns. Coding was used to parse out patterns and themes. Next, memoing was used to organize data. Analysis of documents was used to support or contradict emerging themes from the findings.

Limitations

I should stress that the study was primarily concerned with PTQ and not OMW PreK.

This analysis has focused on school implementation of PTQ. Centers, daycares and ministries can also obtain PTQ. The findings of the study were limited to two rural schools. The demographics of the participants and the school lack the diversity that urban and suburban schools may offer. Roles of the PTQ coach, principal, and teachers were explored. LLEP consultants, PTQ raters, and preschool parents were not included in the study. Finally, neither short-term or long-term impacts of PTQ were examined as part of this study.

Major Findings

The aim of the study was to obtain information for public school administrators in Indiana that want to know more about PTQ preschool implementation. The study had several findings that would be helpful to understand the PTQ process. Based on the research questions, the major findings are highlighted.

Rationales for Seeking PTQ

First, the rationales for seeking and obtaining PTQ yielded complimentary responses. Both school faculties had similar reasons for seeking PTQ. Rural school communities typically do not have options for high-quality preschool. The participants felt this was a need but also a way to expand educational services for their respective communities. Another reason for school faculties to seek PTQ is funding. When a school obtains PTQ Level 3 or 4, they are then eligible for state grants such as OMW PreK and CCDF vouchers. School faculties can seek PTQ implementation through combined state agencies that provide technical assistance and program evaluation to secure PTQ Level 3 or Level 4. A final reason school faculties sought PTQ is provider incentives. Upon attainment of PTQ Level 1 through 4, schools receive one-time funds to implement in their programs.

Positive Attributes of PTQ Process

The administrators', teachers', and coaches' perceptions of the PTQ process varied. One of the principals noted an interesting perception about PTQ. He described the programming as, "a school within a school." The PTQ preschool operates differently than a public school. Many differences emerged as he described others' perceptions of the programming.

Positive outcomes reported by participants were that both school faculties thought the coach was a valuable source of information and a great asset to the staff as they progressed through the levels. Another positive perception reported by staff was receiving the distinction of PTQ and seeing the high-quality programming used with their students. For Clinton School, they were currently the only school in their county to implement PTQ. Both schools reported the daily schedule component of PTQ as a positive. With Level 2 and Level 3, schools were required to create and maintain a daily schedule. All participants shared that the free play component was an aspect they valued in early childhood education and saw the payoffs this approach brought to their preschool programming. Free play can be defined as a student-led time when children can select activities and manipulatives based on their interests. This provides time for self-exploration and independent learning.

Challenges and Negative Attributes of PTQ Process

A big challenge both schools faced was the hidden cost of implementation. Background checks, drug screens, TB tests, first aid training, CPR certification and, professional development all require funding and or additional staff hours to complete each required level. Staff training did not necessarily cost money to attend, due to online trainings that could be accessed for free, but the time it took to complete the hours can become an issue with limited staff hours or contractual obligations of teachers. In addition to completing the training, each level required more steps than the last level. Once the PTQ process was complete, staff often found themselves

confused as to how many hours were required for each level when starting annual renewal trainings. Another challenge both schools shared was staff credentialing. At Filmore School, the principal could not be the director because she did not have enough early childhood coursework. She was a licensed principal but could not hold the title of preschool director. This issue was resolved by making one of the teachers the director, but that was not her role in the school setting. The schools shared strategies they used to fund the requirements as well as some solutions that limit extra staff hours to meet training requirements. Within the PTQ process, the amount of documentation needed for implementation often became redundant in the sense that the schools had many policy and procedures already in place, but PTQ required these in a different form or unique reporting format. A final challenge was the site visit and evaluation piece. The rating process begins when schools "triggered" the evaluation. Triggering occurs when the PTQ coach determines a school is ready for evaluation. At that point in the implementation process, PTQ sends rater personnel to each school to evaluate their program. The raters are not involved in the planning process. Schools are not given notice as to when they will be evaluated. The time range could be a few weeks to a month before a rater arrives. After the visit is complete, on-site school personnel do not get immediate feedback, they are notified by mail after the visit.

PTQ Implementation Actions

The essential actions for Level 1 involve LLEP certification. This requires schools to meet 38 health and safety standards. School staff must pass FBI background checks, drug screens, and TB tests. Level 1 focuses on these health and safety standards. Achieving a form of licensing was the first step schools had to achieve. PTQ has four different options for providers. Schools were given a choice of licensing paths; the first option was to become a licensed

childcare center, which could be applicable to a school if they planned to provide care and programming to infants and toddlers; the other option for schools was becoming a Limited Licensing Exempt Provider (LLEP). This process constituted the majority of the implementation process. Two other standards were required for schools. One was Indiana School regulations which were already met because both schools were public schools. The final standard was an Indiana Code requirement regarding teacher/student ratios that schools had to meet.

Level 2 focused on meeting environmental requirements. These standards included classroom tasks centered around an engaging and interactive setting for students. Actions for Level 2 focused on environments. Level 2 had 11 standards that had to be met. The preschool teachers acquired the majority of standards for this level because it was focused on setting up centers, establishing a daily schedule, and creating a system of parent communication. The teacher participants reported either setting up centers or adjusting them to meet the required indicators. Coach Greg worked with teachers to ensure the centers met all the required indicators. The daily schedule requirements included transitions.

Level 3 has the following curricular requirements: ten centers were the primary requirement of this level; the centers were theme based and have various components that must be included. Actions for Level 3 centered around curriculum. The curriculum needed to be aligned to address the different stages of child development. Again, teachers were the main participants in Level 3. There were ten standards that had to be achieved. Teachers reported working on strategic plans. Also, they (the teachers) had to ensure that the daily schedule reflected a third of their day as free-play time. PTQ expected preschools to be play-based to allow for engaging and discovery learning. Participants also reported having to provide raters with accommodations for students with special needs. Upon achievement of Level 3, schools had

access to OMW PreK funds for eligible students. Schools were also recognized as being a PTQ preschool. Sites were then given a sign for display.

Level 4 involves obtaining national accreditation and mentoring another school that is seeking PTQ. All levels require school staff to meet a certain amount of training on various topics. Actions for Level 4 focused on meeting the highest standards for a high-quality early childhood program. Public schools that sought this level had to complete two tasks. The first standard required schools to receive and maintain national accreditation from an early childhood education association. Neither school had achieved this level. Coach Greg explained that of the twenty schools he had coached, none had sought this level. There were four accreditation models a school could attain. The Office of Early Childhood and Out of School Learning offered four options for schools. The second task schools had to achieve in Level 4 was to mentor another school that was seeking PTQ Level 1, 2, or 3. The task is described as informal.

Stakeholder Roles

Depending upon a participant's job description, stakeholder roles differed throughout the various levels of the PTQ process. Based on the findings, the roles of preschool teachers, director/principal and PTQ coach were the primary roles in the process. Directors described their role as the "master of paperwork." Directors completed paperwork that dealt with compliance of safety standards, forms, and policy, as well as the collection of staff and student data for raters to review. The preschool teachers carried the burden of responsibility once Level 1 was acquired. Their role focused on setting up and executing a classroom environment and curriculum that aligned with the standards outlined in the implementation process for both Levels 2 and 3. The PTQ coach was reported to be a school's main resource for information and guidance. A coach's role varied depending on who described it. Coaches themselves explained their role as a partner

to schools to assist in PTQ implementation. Directors felt the PTQ coach provided necessary information and due timelines to move the process along. The teachers described the coach as a vital ingredient to successful implementation because they provided feedback, tips, and vital information about the process. The teachers felt they could contact the coach with any questions. The responses about the coach's role were all positive and most felt they were crucial to the success of their implementation of PTQ Level 3.

Findings Related to the Literature

The findings of the study resonate with the existing literature review in many ways. Unlike many trends in education, research on early childhood education has remained consistent in that early intervention models have short-term and long-term positive impact on young students. In this dissertation, there were several key areas related to findings in the literature. Participants cited reasons for seeking high quality programming, how to achieve this type of programming, as well as key aspects related to standards. The PTQ model utilizes many of the research topics explored in the literature review.

Rationales for Seeking Preschool

Historically, high quality preschool programming has been studied for decades. First attempts at early childhood education began in 1827. Schools were established to provide a source of care for parents who wanted to work outside the home, enabled young students to socialize with peers outside the home, and established a mechanism for strengthening early childhood education (Vinovskis, 1993).

Notable programs included the Perry Preschool Project that featured many of Piaget's theories on child development (Weikart,1966). Like Perry, many research-based preschools were developed to provide high-quality early childhood programming to low-income and minority

students. The Philadelphia Project was a program model that emphasized social and emotional growth as well as cognitive development. Students' needs and preferences guided instruction and activities (Gray & Klaus, 1965, p. 33).

Volumes of research have been done on federally based early childhood programs. The rationale for instituting these programs is more widely focused than research-based models. Head Start, for example, was not just an educational program (Vinovskis, 1999). Five of the performance measure objectives included: enhancing children's growth and development; strengthening families as the primary nurturers of their children; providing children with educational, health, and nutritional services; linking children and families to needed community services, and ensuring well-managed programs that involve parents in decision-making (Henry, Gordon, & Richman, 2006). These performance measures align with PTQ objectives. PTQ Level 1 focuses on health and safety standards. Additionally, the parents are actively involved in each program by taking part in the decision-making progress. Examples of parent involvement include annual parent-teacher conferences, program evaluation, and an open-door policy in which parents are welcome to visit the classroom.

A state-funded preschools' goal was to build a preschool foundation that was high quality, developmentally appropriate, and comprehensive in scope targeting the cognitive, physical, and the social-emotional domains of development (Zigler, Gilliam, & Jones, 2006). The state-funded programs began with variations in programming. Public sentiment as reported by the National Institute for Early Education Research (NIEER) in a 2003 poll showed 90% of respondents felt state funded and universally accessible preschool was needed (Barnett, Robin, Hustedt, & Schulman, 2003). This research echoes the desire of both participant schools in their rationale for seeking high quality preschool programming.

Policy and Staff Requirements for QRIS

A key feature of PTQ is specific staffing requirements as well as policy implementation, Previous research on early learning policy and staff requirements varied in their view of quality of programming. Montessori believed a teacher should model and demonstrate the use of learning materials to help students focus. The teacher in this setting was encouraged to be credentialed in the Montessori Model (Klein, 2007).

Research-oriented preschools were started in the 1920s by the Iowa Child Welfare Research Station, Bureau of Educational Experiments, Fels Institute at Yellow Springs, Teachers College, and many other universities. All centers were located near or in child welfare institutes and centers. These centers provided a wealth of research used by the child development movement. The preschool teachers employed in these institutions were trained there, as well. White and Buka (1987) provided important points of reference for the research and growth of preschools. Research-initiated programs offered higher quality than a typical public program because they were supervised closely, were directed by experts, had low child-staff ratios, and small group sizes (Barnett, 1992).

NIEER compiles a yearbook on the state of preschool. This publication began in 2002. The data are generated from the National Center for Education Statistics (NCES). Table 5.1 reports the amount of state programs that meet the required benchmarks for the listed policies. PTQ has many of the same quality standards but not all of them. Similar policies include standards, degree, specialized training, professional development, staff-student ratios, and a continuous monitoring system. Indiana does not require assistant teacher degrees or maximum class size (NIEER, 2016)

Table 5.1illustrated how common these standards were among the states using the quality standard benchmarks.

Table 5.1 Quality Standards Attainment

Policy	Of the 59 state-funded pre-K initiatives, number of states meeting benchmarks
Early learning & development standards	59
Teacher degree	35
Teacher specialized training	51
Assistant teacher degree	19
Staff professional development	49
Maximum class size	47
Staff-child ratio	49
Monitoring/Continuous quality improvement system	42

2016 NIEER

Table 5.2 Quality Standards Requirements

Policy	State Pre-K Requirement
Early learning & development standards	Current: National Education Goals Panel content areas covered by state learning standards for preschool-age children must be comprehensive New: Comprehensive, aligned with state infant & toddler and K-3 or college & career ready standards, aligned with child assessments, culturally sensitive, and supported
Teacher degree	Current & New: Lead teacher much have a BA, at minimum
Teacher specialized training	Current & New: Lead teacher must have specialized training in a pre-K area
Assistant teacher degree	Current & New: Assistant teacher must have a CDA or equivalent, at minimum
Staff professional development	Current: Teacher must receive at least 15 hours/year of in-service professional development and training New: Teacher and assistant teacher must receive at least 15

	hours/year of in-service professional development and training, individualized professional development plans, and coaching
Maximum class size	Current & New: Maximum number of children per classroom must be 20 or fewer
Staff-child ratio	Current & New: Lowest acceptable ratio of staff to children in classroom (e.g., maximum number of students per teacher) must be 1:10 or better

2016 NIEER

Based on the NIEER research of the quality standards checklist, Indiana was rated as meeting three of the eleven. Those standards are early learning and development standards, staff professional development, monitoring/continuous quality improvement system (NIEER, 2016).

National Accreditation Programs

The dissertation explored the levels of PTQ. PTQ Level 4 requires achievement of national early childhood accreditation. Research was conducted on eight national organizations that focused on early childhood education. Each of these models had similar characteristics regarding application and implementation (Elicker, Ruprecht, Langill, Lewsader, Anderson, & Brizzi, 2013). The models varied based on the population served. Some models only worked with child care centers, while others included high school and adult care. PTQ required school faculties to adopt one of these models. The two school faculties in the study did not pursue Level 4. Research indicated that all accreditation systems had five basic functions: quality standards, a monitoring system, support for quality improvements, a financial stipend to reward providers, and a communication system for parents and the community. The PTQ process shares these components. The accreditation systems researched also required annual professional development training and site evaluations. These requirements are PTQ requirements, as well. Of

the eight accrediting bodies described in the research, only three can be used to acquire PTQ Level 4. Options include NAEYC, NECPA, and COA (Elicker, Ruprecht, Langill, Lewsader, Anderson, & Brizzi, 2013). Another accreditation option for public schools is AdvanceEd which was not explored in this dissertation.

Participant Roles

The participant input in the dissertation described key stakeholder roles in the PTQ. The findings revealed how each role played a vital part in implementation. Many preschool models have been studied prior to this study. Key stakeholder roles vary, as well as the theory supporting their roles. The role of the teacher and their requirements varied. Large-scale public preschool programs, for example, had staff that were less highly qualified than research-initiated programs (Barnett, 1992). This role varied between PTQ programs because staff were required to have some type of credential or early childhood degree or a teaching license. The Montessori School program requires teachers to model and demonstrate skills the student needs. Teachers were often encouraged to be credentialed in the Montessori Model (Klein, 2007).

Early education constructivist theorists had differing opinions on the role of the preschool teacher, as well. Dewey wrote that the child should be the center of learning while the teacher provided modeling (Dewey, 1938). Piaget recognized that students learned developmentally and the teacher role should be limited so students could discover and learn as their development progressed (Piaget, 1953). Vygotsky's view of a teacher's role was most similar to that of a teacher's role in PTQ. In Appendix C, PTQ Level 3 references teacher interaction. In the PTQ rubric, teachers are to observed actively interacting with children and planning various exploratory centers. Vygotsky determined that a teacher's role was significant. In a Vygotskian classroom, teachers were actively participating in tasks with students on a regular basis

(Vygotsky, 1978). Froebel viewed the teacher roles as including growth, studying the child, and discerning what each child's needs are (White & Buka, 1987). Froebel's curriculum concept originated from The Nature Philosophy of Schelling, Novalis, Carus, Fichte, and Schleiermacher who all recognized the work of the universal divine principle of nature and science having a bearing on the development of natural beings in the science of education. This notion applied to all kinds of individuals in all stages of development (White & Buka, 1987). These models mirror the PTQ model, in that when raters visit the classrooms they are looking for evidence of staff and student interactions at many levels. In PTQ Level 3 for example, teachers plan the curriculum and ensure the staff provides supports for the students in their active learning experiences. Also, science exploration is part of the daily activities and may include collections of natural objects, living things to care for, and simple experiments.

Coaching services or mentors are provided to preschool staff and programs in many states. According to the NIEER The State of Preschool Yearbook for 2016, many states offer these services. Table 5.3 shows the offering states and what mentoring programs they provide. Indiana offers mentoring to PTQ programs. Participants responded positively to the services the coach provided. The table includes states that offer some type of coaching or mentoring programs. The descriptions of each state's programs are listed and contain similarities and differences. Some states require mentors or coaching. Other states have voluntary programs. Each mentor program varies in its role and involvement. Some states allow mentor roles to be developed locally. Coaches may observe teachers or conference with them. Frequency of meetings varies as well.

Table 5.3 State Preschool Programs with Coaching or Mentoring

States with Coaching	Description

Services	
Alaska	Coaching and mentoring services are being piloted to some lead and assistant teachers on a voluntary basis. Alaska uses the My Teaching Partner Coaching System and currently has 27 teachers enrolled.
Arizona	Coaching is provided to all programs participating in Quality First Scholarships. The coaching can be used to support teachers, assistant teachers, and administrators. While the coaching is required, the audience receiving the coaching is not dictated by the state.
Georgia	Coaches observe each teacher monthly. They conference with the teacher on the same day to identify and discuss the effective interactions from the Instructional Support domain of the CLASS observational tool. The number of teachers assigned to a coach can vary depending on the type of coaching model being implemented.
Illinois	Coaching is provided to teachers in PFA classrooms based on the monitoring report for that PFA program. However, coaching is not required by state policy.
Iowa	Program standards state that mentoring, coaching, and professional development must be included in a program's professional development plan, but it is locally developed.
Kentucky	Technical Assistance includes the use of higher education faculty who were provided stipends for their time.
Massachusetts	Coaching or mentoring opportunities are available for nonpublic employees through the state's Educator Provider Support Grant, but not required.
Michigan	All classrooms are assigned an Early Childhood Specialist (ECS). The requirement is that each ECS is to be in the classroom for a minimum of three times per year. However, the reality is that ECSs are in the classroom anywhere from weekly to monthly depending on the needs of each teaching team. Classrooms with new lead teachers receive more frequent visits. Classrooms with lower Program Quality Assessment (PQA) scores or other concerns also receive more attention. See http://www.michigan.gov/gsrp for Implementation Manual and Early Childhood Specialist section for details.
Nebraska	Coaching is provided to district classrooms that participate in the state QRIS or are Pyramid Model full implementation sites.

New Jersey	Coaches are provided at a ratio of one coach for 20 classrooms. Master teachers are provided at a ratio of one to 18 classrooms.
North Carolina	The amount of mentoring/coaching that a NC licensed teacher receives is based on formally assessed needs that result in different types of professional development plans, including specific strategies designed in collaboration with the teacher, evaluator, and site administer (private sites). Teachers need different amounts of onsite coaching/mentoring (scaffolding, role modeling, etc.)
Rhode Island	The state contracts with a vendor who is available to provide in program/classroom support as well as large group support.
Wisconsin	Coaching and mentoring is built into the state teacher licensing system for teachers who elect to use a professional development plan (instead of credit-based license renewal) and in the teacher effectiveness process. For additional information, see: http://dpi.wi.gov/ee

2016 NIEER Yearbook

Conclusions

Implications for Action

This case study provided tangible evidence of the effectiveness of high-quality preschool, not only in Indiana but also at the national level. As numerous studies indicate, preschool is a vital piece of the educational success of students (see for example, Perry Preschool Project or Abecedarian Study). Indiana's On My Way PreK allowed public school students access to high quality early childhood programming, which in turn creates a greater opportunity for school readiness and skill development. This case study illuminated the PTQ process by providing educator perceptions of the role they played and what tasks were required to achieve PTQ Level 3.

Since there were so few PTQ public school sites, this case study provided meaningful guidance on how schools can implement PTQ preschools within the public-school system. A

school considering PTQ implementation should break the process down into two parts. First, the school should focus solely on Level 1 implementation because it requires schools to work through a different agency than PTQ. Level 1 required schools to achieve limited licensing exempt provider status. Once, this is complete, a school could begin the process of achieving Levels 2, 3, and 4. Upon completion of highest desired levels, schools should then begin seeking the various funding options that are paired with PTQ Level 3 attainment. These options included OMW PreK which the state grant for low-income families. Also, schools could utilize CCDF vouchers for families that do not quality for OMW PreK. Finally, early learning expansion grants were available to schools once they complete PTQ.

Recommendations for Future Research

PTQ implementation in public schools is a relatively new concept in Indiana. Initially five counties were invited to participate. At the time of this writing, all schools in Indiana can implement the programming. Many aspects of the program could be studied further to assist schools in making data-driven decisions.

First, the rationale for implementing PTQ could vary by urban or suburban districts. The study included only rural schools. Larger districts' rationale could vary due to demographics and funding opportunities. A more comprehensive study could be done to understand each PTQ public school's rationale for seeking PTQ. The study could characterize schools by first identifying whether they were rural, suburban or urban. Then, the research could compare and contrast the results based on rationales and if location made a difference in the rationales.

A second area of future research could include a study of each PTQ Level instead of the overall process. More in-depth studies on specific actions needed for each Level of PTQ would be beneficial for schools.

An integral part of Level 1 requires schools to obtain many screening requirements, such as FBI background checks, drug screens, and TB tests. These requirements typically cost around $200. A research study dedicated to exploring all funding opportunities would provide schools many avenues to pursue, depending upon their particular location and community partnerships. Coalitions and community partnerships are often used; however, with at least 80 schools having been through the process to date, more creative solutions may be possible. In addition to required screenings, PTQ preschool staff must complete certain annual trainings such as CPR and first aid. Also depending on the level, professional development hours must be completed by each staff member. Finding out what each school did would allow future schools more information and options to choose from.

In addition, more research into the specifics of Level 4 implementation, which was not attempted by either school in the study, would be beneficial. Coach Greg had not had any experience with Level 4. Further research could be done to provide schools the information on how Level 4 is accomplished. The standards allow schools to select from a few national accreditation models. More research could be conducted to learn which models were used frequently by schools and what perceptions school faculties have regarding that process.

Another component of Level 4 is mentoring. What does that look like for schools? Principal/director responsibilities continually increase. Having more information prior to committing to Level 4 would be helpful. National Preschool Accreditation models for public school in Indiana are limited to four models: NAEYC, NECPA, AdvancED, and COA. A focused study of these models would allow schools to decide which model would complement their early childhood programming.

Another area for further research investigation could include the analysis of the PTQ process, which did not include LLEP consultants and PTQ raters. The raters and consultant insights could provide schools further information and guidance regarding the process. Their role was not studied in the research process, yet they are a key factor in a school receiving PTQ. Their site visits and evaluations determine whether or not a school achieves PTQ. The LLEP consultants could share their experiences when rating public schools. The PTQ raters could share insights on Levels 2-4.

Prior to PTQ, how did Indiana preschools measure on the quality scale? A future study could seek clarity in how practice changes pre/post implementation, if at all. Is PTQ a bureaucratic process just to get funding or is it really meaningful experience for participants?

Additionally, future researchers may focus on program impact. As more and more schools begin to offer PTQ, it is important and relevant to investigate whether OMW PreK data results illustrate positive outcomes in both the short term and long term. OMW PreK provides low-income families the ability to attend high-quality preschools in the public-school setting. As these students enter kindergarten and beyond, short and long-term effects should be studied to determine if PTQ programming impacts student performance. The programs would need to be set up so they can be studied (for example, it would be ideal to have randomized control trials, with randomization at least at the school level).

Because no classroom observations were conducted, a future study on how the PTQ classroom compares to a non-PTQ classroom would be informative. The requirements for PTQ are many and time-consuming. Investigating similarities and differences between the two types of programming would be beneficial to educators.

Concluding Remarks

Upon beginning this study, only five counties in Indiana were eligible for state preschool funding. During the study, five more counties were added to the eligibility list. At the time of this writing, all 99 counties in Indiana are eligible for early childhood funding as long as they seek and obtain PTQ Level 3 or Level 4. This research will provide schools' faculties the ability to make sound decisions regarding their pursuit of PTQ.

The PTQ implementation process allows schools the opportunity to expand their offerings to four year olds. This opportunity not only provides high-quality early childhood programming, but it also offers early intervention. Schools spend thousands of dollars on remediation, but the cost of preschool programming may far outweigh the cost of remediation.

The findings show that PTQ attainment is an option for public schools. Knowing the results from schools that have been through the process and understanding the benefits of preschool enable public schools to make decisions that will support future cohorts of their students, but it will also create better communities for families.

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Appendix A-Interview Protocol

Thank you for taking the time to speak with me, (name). I'd like to learn more about the Paths to Quality process. The information collected from this interview will be used in a doctoral dissertation and your personal information and responses will remain confidential/anonymous.

I'm looking forward to learning from your ideas, but if I ask any question that you would prefer not to answer for any reason, just let me know and we'll move on to the next question. Also, for quality purposes and to aid in my ability to review information, can I obtain your permission to record our discussion? I will transcribe your responses and use them in my research. I will keep the data for three years in a secure location. Do you have any questions for me? Let's get started...

1. State your name.

2. What is your position?
    - Years of experience
    - Roles held up to this point?
3. Describe your educational background.
    - College
    - Training
4. Describe your role in the Paths to Quality Implementation.
    - What tasks were you responsible for?
    - How were tasks divided?

5. Walk me through your journey of the implementation, for example what tasks did you oversee, how did you accomplish them?
    - When you did you get involved?
    - How long did each task take to complete and what was required?

6. Describe phases of the implementation that were most difficult and why?
    - Level 1
    - Level 2
    - Level 3
    - Level 4
    - Teacher requirements? Background checks, shots?
    - Policy changes?

7. Explain a task that was most rewarding in the process.

8. What advice can you give others seeking PTQ implementation?

9. If you could change anything about the process what would it be and why?

10. Given the choice, would you seek PTQ again and why or why not?

I really appreciate your time today – that is the end of my formal questions.

- Is there anything else you would like to add?
- Are there any questions I did not ask you that I should have asked?
- Is there anything else I've missed?

*Teacher questions:

a. Describe naptime.
b. What meals are provided and how are they received?
c. What amount of screen time (computers, tablets, television) do the students have access to on a daily basis?
d. Describe transitions from one activity to the next.

Appendix B-Document Checklist

Document	Evidence/Comments/Comparisons
Planned Curriculum -High Scope- -Handwriting without Tears	
Program evaluation by families and staff	
Strategic plan • Completed annually • Contains goal setting • Contains long range planning	
Environmental accommodations for students with special needs • Contains a written plan that addresses how to care for children with special needs	
Policies for Basic Health and safety Provider Eligibility Standards (PES)	
Membership to a national childhood organization	Membership cards Invoices for membership
Philosophy for Preschool	
Communication system for families	Newsletters
Daily Schedule	

Appendix C-Preschool Classrooms in Public Schools

Level 1 Preschool Classrooms in public schools will be able to:

• Meet minimum health and safety standards
• Develop and implement basic health and safety policies and procedures

Preschool Classrooms in traditional public schools meet the standards for a level 1 rating providing the following are met:

1. The Child Care Development Fund (CCDF) Provider Eligibility Standards(PES) are met and verified by Family and Social Services Administration (FSSA), the Office of Early Childhood and Out of School Learning
2. Standards regarding teacher child ratios and group sizes have been met as defined up IC12-17.2-4
3. Indiana School House regulations for sanitation, fire safety and food service standards are being met as required for public schools as verified by the appropriate state agency.

Level 2 Preschool Classrooms in public schools will be able to:

- Provide an environment that is welcoming, nurturing, and safe for the physical, emotional, and social well-being of all children
- Provide a variety of learning materials that reflect the age, interests, and abilities of each child
- Provide for children's language and literacy skill development
- Provide pertinent program information to families
- Promote professional development and training for staff

Preschool Classrooms in public schools meet the standards for a level 2 rating providing the following are met:

1. All requirements of Paths to QUALITY Level 1 are met.
2. Administrator receives orientation and trains staff on *the Indiana Academic Standards for Young Children Age Birth to Five (the Foundations).*
3. Administrator is a member of a nationally recognized early childhood organization.
4. Public School has a written philosophy and goals for preschool children.
5. 25% of teaching staff, including the Director, have either a Child Development Associate credential (CDA) or equivalent certificate, OR an early childhood degree or equivalent degree, OR have completed 45 clock hours of educational training leading to an Early Childhood/Child Development degree or CDA credential.
6. At least 50% of teaching staff participate annually in a minimum of 15 clock hours of professional development focused on topics relevant to early childhood.
7. A system is in place for communicating pertinent information to families, daily and in an annual family conference for each child.
8. Classroom environments are welcoming, nurturing and safe for children to have interactions and experiences that promote their physical, social and emotional well-being. Indicators must include:
    1. Each child and his/her family are warmly acknowledged
    2. Each child feels safe, accepted, and protected and this is supported by daily practices that reinforce respect for people, feelings, ideas, and materials
    3. Children are under adult supervision at all times
    4. The environment includes representation of each child and family (including all age groups, abilities, and cultures), which might include books, pictures, photographs, music/songs, games, toys, dress-up clothes/materials, and foods
    5. A place for storage of each child's personal belongings and possessions is labeled with the child's name
    6. Teachers communicate with and listen to children (verbal and non-verbal messages) with lots of one-on-one attention throughout the day and usually at eye-level, including time when the teacher is down on the floor with the children
    7. Children's ideas, requests, and questions are acknowledged with a verbal response or physical gesture

8. Children's feelings are acknowledged with an accepting, non-critical verbal response or physical gesture
9. Teachers refrain from negative verbal or physical responses to children at all times, which includes yelling, criticizing, scolding, threatening, using sarcasm, name calling, yanking, pinching, squeezing, or spanking
10. Destructive or disruptive behavior is addressed with children (face-to- face rather than from a distance) by the teacher, explaining the effect of the behavior, stating the desired behavior and redirecting, or helping the child make alternate choices
11. Conflicts are resolved by/with children through a problem-solving approach (acknowledge feelings, listen to children share what happened, ask for ideas or solutions, and follow through)
12. The teacher sometimes joins in children's play, expanding upon their ideas and playing interactively
13. The classroom is generally characterized by varying sounds and/or comfortable conversations from engaged children and involved adults

9a. Daily schedule provides ample time for child-directed choices with activities and materials that are geared to the age, interests, and abilities of each child. Indicators must include:

1. The daily schedule is consistent and predictable
2. The classroom is arranged with areas for individual, small group, and large group activities
3. Children are encouraged to choose the area in which they want to participate, and whether they want to play alone, with one friend, or with several
4. Routine tasks (which might include labeling, sorting, classifying, folding clothes, counting while cleaning up or setting the table) are used as learning opportunities
5. Transitions are generally relaxed, allowing time for play and completing activities. Children are transitioned from one activity to the next to avoid idle sitting and waiting time
6. Meal times are relaxed, with no scolding or nagging. Children are encouraged to sample new foods but allowed to eat the foods of their choice
7. If Nap/rest time is offered, nap/quiet time is relaxed with alternative, supervised quiet activities available for the non-nappers and early risers.
8. The teacher has a system for rotating toys and materials for variety so that unused toys are stored and later reintroduced
9. TV/VCR/DVD, if used, is primarily an educational experience. Teacher discusses what is viewed with children; OR TV/VCR/DVD is not used at all

9b. Outdoor play time indicators must include:

1. Outdoor play is included daily when weather, air quality, or environmental safety conditions do not pose a health risk. Active indoor play may be a replacement when necessary
2. Outdoor/large motor activities and plentiful play materials for a variety of skills are offered (for example, climbing, running, jumping, balancing, riding and playing with balls)
3. Outdoor play areas are safe and supervised appropriately.

10a. The classroom is arranged and utilizes enough materials and activities to provide a variety of age and developmentally appropriate interest centers that invite children's exploration. Each interest center must contain at least three different items. Interest centers must include:

1. Reading:
Materials might include books, soft washable seating/pillows for use while reading
2. Writing:
Materials might include writing tools, paper, envelopes, typewriter, letters, and numbers
3. Art:
Materials might include drawing materials (crayons, markers, thick pencils, variety of paper, sizes and types, not coloring books or dittos/worksheets), painting materials, tools (scissors, hole punch, tape), three-dimensional materials (play dough, clay with tools), collage materials (catalogs, magazines, paper scraps, fabric pieces, string, yarn, cotton balls, pipe cleaners, craft sticks)
4. Blocks:
Materials might include different size/types of blocks and accessories such as small people, animals, vehicles, road signs, and materials to enhance building, sticks, stones, tape, string, craft sticks, interlocking blocks
5. Dramatic Play:
Materials might include dress-up clothes, such as work boots, high heels, and a variety of hats, career gear/attire/uniforms, purses, billfolds and multi- cultural outfits. Other items would also include large pieces of fabric/scarves, child-size play furniture, dishes, pots, pans, dolls (multicultural dolls included), dollhouse or other play-sets, accessories for dolls, and props" for different themes
6. Math/Numbers**:** Materials might include small objects to count/sort/classify, measuring tools (scales, rulers), numbers/shapes, number games, puzzles and pattern blocks
7. Music and Movement: Materials might include audio equipment, variety of tapes/CDs, and music boxes, musical toys, instruments, dance props such as scarves/streamers
8. Nature and Science**:** Collections of natural items (shells, rocks, flowers, bugs), living plants, pets to care for, science games, toys, magnets, magnifying glasses, cooking opportunities
9. Sensory Play: Materials might include water, play dough, sand, or similar materials, along with kitchen utensils, measuring containers, shovel, trough, buckets, small cars and trucks and water-play accessories for pouring, measuring, squeezing, and basting
10. Small Motor/Manipulative: Materials might include blocks, puzzles, crayons, pencils, scissors, interlocking blocks and other small building toys, pegboard and pegs, games, counting materials, sorting or classifying materials and containers

11a. Children are read to daily and encouraged to explore books and other print materials. Indicators must include:

1. Teachers read and/or look at books with children daily, including during quiet, individual lap time
2. Books are available and accessible daily for children to look at and enjoy on their own
3. Children are invited to tell stories or "read" a picture book
4. Children are encouraged to explore print and writing. Examples might include scribbling, inventing spellings, writing their names or other words, and making books
5. Teachers write words dictated by children as they tell a story or describe their pictures

6. A variety of writing materials and toys to be used while writing is available
7. Materials might include: markers, child-sized pencils, chalk and chalk board, paper, envelopes, stamps, tape, paper punch, stickers, magazines, calendars, toy telephones, puppets, tape recorder, alphabet letters, or flannel boards
7. Children are provided language materials daily, in addition to books, which might include puppets, flannel boards, recorded stories, and picture card games
8. Books must include a variety of imaginative, rhyming, and informational books

Level 3 Preschool Classrooms in public schools will be able to:

- Implement a planned curriculum that addresses the stages of child development
- Demonstrate professional growth of Administrator and staff
- Facilitate family and staff input into the program
- Establish a strategic plan
- May be working towards national early childhood accreditation

Preschool Classrooms in public schools meet the standards for a Level 3 rating provided that the following are met:
1. All requirements for Paths to QUALITY Level 1 and 2 are met.
2. School has been in operation for a minimum of one academic year.
3. 50% of teaching staff have either a CDA or equivalent certificate, an early childhood degree or equivalent degree OR completed 60 clock hours of educational training leading to an early childhood/child development degree or CDA credential.
4. At least 50% of teaching staff, including the Administrator responsible for the supervision of classroom staff participate annually in a minimum of 20 clock hours of professional development focused on topics relevant to early childhood.
5. Program evaluation is completed annually by families and staff.
6. A strategic plan is completed and includes annual evaluation/ goal setting and long-range planning/goal setting.
7. A written curriculum reflects the program philosophy and goals, is based on child development and appropriate practice and provides for the various ages, ability levels, and developmental stages of the children. This curriculum meets the following requirements:
    1. Provides for children's physical, cognitive, language, literacy, and social- emotional development. It includes goals for children that are consistent with the Indiana Foundations for Young Children
    2. Families are made aware of the curriculum used by the program through one or more of the following ways: parent handbooks, newsletters, orientation, and/or family meetings
    3. Staff members are oriented to the curriculum. Lead teachers plan daily activities with assistants so that curriculum can be implemented effectively to provide support for children in their active learning experiences
    4. The curriculum and goals for children are reflected in everyday practice including through daily, weekly, or monthly written lesson plans
    5. Assessment is appropriate to the curriculum and focuses on children's strengths. It may include portfolios, conversations, anecdotal notes, and developmental notes

8a. Children's physical, cognitive, language, literacy, math, and creative development is supported. Indicators must include:

1. Many opportunities throughout the day for communication (all ages), which might include sharing information, pointing out logical relationships, and encouraging children's ability to reason
2. Many opportunities throughout the day for reading
3. Every day children have many experiences and materials available which are based on "The Foundations" to encourage imagination and creativity
4. Children's thinking is stimulated through experimentation, exploration, and access to interesting materials and adult support
5. Displays of children's art are available at children's eye level and show that most art work is exploratory and unique to each child
6. Teachers encourage language and literacy development through interactions which might include books, songs, puppet play, and writing/drawing opportunities
7. Math experiences are a part of everyday activities and routines
8. Daily music experiences are available and may include singing, creative movement, a variety of types of music, and a variety of musical and rhythmic instruments
9. Science exploration is part of daily activities (examples may include, collections of natural objects, living things to care for, cooking, and simple experiments)
10. The daily schedule provides a balance of activities including: quiet and active, individual and small group and large group, child initiated and adult initiated
11. Large group activities are not excessive for any part of the daily routine

9. Children are actively engaged throughout the day in making choices about activities and materials. Indicators must include:

1. Children should be given several free choice periods daily. Children's choice (individual or small group play) occur at least one third of the time and includes indoor and outdoor play
2. The teacher supports children's development by gathering information through child observations that is used to guide lesson planning
3. The teacher supports children's play by providing additional materials and experiences that expand on children's interests and skills
4. The teacher extends learning for children by talking about what they are doing and asking open-ended questions that promote critical thinking skills
5. The teacher finds ways to help children learn skills when it is developmentally appropriate and when the child shows an interest
6. The teacher takes advantage of the many natural learning experiences associated with daily life and makes those "teachable moments opportunities for learning

10. Plans and environmental accommodations for children with special needs are evident. Indicators must include:

1. A written plan is in place for effectively caring for children with special needs
2. Space is arranged to provide children of different ages and abilities daily access to materials and opportunities to engage in play and projects without limitation or interference from one another
3. Adaptation of materials occurs to provide children of different ages and

abilities daily access to materials and opportunities to engage in play and projects without limitations or interference from one another
4. The teachers include children in age-appropriate self-help activities, such as dressing, picking up toys, washing hands, folding clothes, serving food, and
setting or cleaning up meals
5. The teachers answer children's questions about differences in a respectful and factual way

Level 4 Preschool Classroom in a public school will be able to:

• Meet the highest standards for high quality early childhood education
• Administrator/director agrees to assist other programs in quality improvement through volunteer mentoring

PreK Classrooms in a public school meet the standards for Level 4 rating provided that the following are met:

1. Program meets all the requirements for Paths to QUALITY Levels 1, 2, and 3.
2. National Early Childhood Education Accreditation has been received and maintained through a national accredited system approved by the Office of Early Childhood and Out of School .
3. Administrator/Director volunteers to informally mentor a program at a Level 1, 2, or 3.

Appendix D-Coding Matrix

Code Words	Themes
Undergraduate degree Graduate work Bachelor's degree Master's degree Years of Experience Preschool teacher Principal Developmental Preschool Teacher PTQ coach Early childhood degree Licensure	Participant demographics
Grant opportunities On My Way PreK Funding streams	Rationale for seeking PTQ
Director Coach Rater Lead Teacher Nurse Para professionals	Roles (or participants) within Process
Checklists Procedures had to be posted TB Tests FBI Background checks Drug testing Bathroom procedures Handwashing procedures Safety drill log Emergency information Training LLEP requirement Ratios of 12 to 1 for four year olds CPR	Health and Safety Requirements/ PES/LLEP/Level 1

First aid LLEP Consultant Office of Early Childhood	
Schedule Transitions Eye-level displays of student work Family area where photos of students families are displayed Newsletters home	Environmental components/Requirements of PTQ/Level 2
Centers-dramatic play, blocks, math, science, reading, art, writing Play-based Eckers Approach Lesson planning Standards Teacher-directed activities that are literacy based High Scope Hands-on activities Agency-Hufford Child Care Resource and Referral	Curriculum/PTQ 3
Mentoring Joining a national organization	National Accreditation/PTQ 4
"Trigger the rater" varies up to each school no set timeline	Timeline of the Process
Requirements for training hours Requirements for nap time Center requirements and components Family connection requirements State standards-Foundations Modifications for Developmental preschool	Policy vs. Practice
Every year Re-evaluate us	Recertification process
Substitute teacher logistics are tricky	Recommendations for other schools
Agency-Hufford Child Care Resource and Referral Early Learning Partnerships for Early Learning	

Specialists Office of Early Childhood Consultants Consortium Purdue University	Resources for Schools
TB tests FBI Background Checks Drug screens Curriculum and materials Memberships to National Organization Training salaries for hourly employees	Out of pocket costs for schools